AGES XXVIII ANNUAL SCIENTIFIC MEETING

EVOLUTION TOWARDS EXCELLENCE

ABSTRACT BOOKLET

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8th – 10th March 2018
Crown Promenade, Melbourne

www.ages.com.au

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Dr Lenore Ellett	Committee Member
Dr Kate McIlwaine	Committee Member
Dr Stuart Salfinger	Committee Member
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CPD POINTS

This meeting is a RANZCOG approved O&G meeting. Fellows of this college can claim 19PD points for full attendance.

MEMBERSHIP OF AGES

Membership application forms are available from the AGES website or from the AGES Secretariat.
https://yrd.currinda.com/register/organisation/43

AGES CONFERENCE ORGANISERS

YRD Event Management
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This brochure and online registration are available on the AGES website **www.ages.com.au**

FACULTY

Dr Jade Acton	WA
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Dr Catarina Ang	VIC
Dr Amanda Baric	NSW
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Mr Liang Low	VIC
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Dr Rebecca Szabo	VIC
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Dr Michael Wynn-Williams	QLD
Dr Natalie Yang	QLD
A/Prof Anusch Yazdani	QLD

EVOLUTION TOWARDS EXCELLENCE

AGES is proud to invite you to its 28th Annual Scientific Meeting, held in Melbourne on 8-10 March 2018 at the Crown Promenade Hotel

Dear Colleagues,

On behalf of AGES and the local organising committee of the 28th AGES Annual Scientific Meeting, I would like to welcome you to Melbourne, the most liveable city in the world and the Australian capital of science, art and culture. The Royal Botanical gardens at this time of year will dazzle you with a beautiful tapestry of autumn colours. As the temperature cools and the nights lengthen, you can find an abundance of world class dining experiences, festivities, art and theatre.

Over the last three decades, endoscopic surgery has witnessed a significant evolution in technology and expertise. This has led to a remarkable refinement of gynaecological surgery, contributing significantly to the betterment of women's health. Under the title "Evolution towards Excellence", the scientific committee has developed an excellent program that focuses on the training and ongoing development of our surgical and clinical practice. The program provides an opportunity to learn about the latest clinical advances, international developments in research, and practice and management of the common gynaecological conditions.

We are delighted to host our international faculty of: Dr Ted Lee, the Director of Minimally Invasive Gynecologic Surgery of the University of Pittsburgh Medical Center; Dr Barbara Levy, an obstetrician-gynaecologist in Washington, District of Columbia and a previous president of the AAGL; and Associate Professor Pietro Santulli from Cochin University Hospital in Paris. We are also pleased to welcome Professor Shailesh Puntambekar, the Medical Director at the Galaxy CARE Laparoscopy Institute, who will be presenting the AGES/AAGL Exchange Lecture. Our scientific committee is honoured to have Dr Arnold Advincula, who has been a pioneer of Robotic surgery and Dr Gary Frishman, the current President of the AAGL. The international speakers will join an eminent Australasian contingent to take you on this provocative exploration of the contemporary controversies facing our specialty. The depth of talent that we have in Australasia is incredible and the AGES Training Program is producing top-class surgeons and presenters to whom we are grateful for participation and continuation of the strong scientific and surgical talent that AGES is renowned for.

The Live Surgery session will make a come-back in 2018. This will provide an exceptional opportunity to learn invaluable tips and surgical techniques in an engaging and interactive environment.

The highly successful hands-on Interactive Hubs are here in an expanded form with greater choice and skill acquisition. It is a central feature of the new-look trade area. The Interactive Hubs will be supervised by a host of eminent local and international experts.

The final session of the meeting will be 'Barriers to Excellence: How do we Evolve?'. This will be a panel discussion of the issues facing gynaecology today and we are delighted to have Jamila Rizvi on the panel. Jamila is an author, presenter and political commentator who is described as one of the pre-eminent voices of young Australian women online, who injects her own special brand of humour, irreverence and authenticity into the public debate.

The social program this year is very exciting, with our annual black tie gala awards dinner at the Crown Towers River Room overlooking the Yarra River. It should prove to be filled with wine and food. Our dinner will not only graduate new AGES fellows, but host the ASM awards and finally be the opportunity to own one of the three artworks created by Carrie Pitcher, which have graced the covers of our three meeting brochures for 2017/2018. Those hot properties will be auctioned off, with all proceeds going to Share the Dignity, an outstanding Australian charity bringing dignity to homeless, at-risk and women experiencing domestic violence through distribution of sanitary items and funding funerals of those killed as a result of domestic violence. We also will be auctioning the Board Dozen – 12 bottles of outstanding wine to ensure you really enjoy your meal in the years to come.

Finally it is here. Welcome to the AGES 2018 ASM. Welcome to Melbourne. Welcome to the new age of AGES.

Haider Najjar
Director, AGES
Conference Chair

Emma Readman
Treasurer, AGES
Conference Scientific Chair

KEYNOTE INTERNATIONAL FACULTY

Ted Lee

Barbara Levy

Pietro Santulli

THURSDAY 8TH MARCH 2018

0700 - 0745	Avant Breakfast Workshop - What to do when it's new: innovation in medicine	M11
0700 - 0800	Conference Registration	PROMENADE FOYER
0800 - 1000	**SESSION 1: SURGICAL EVOLUTION TO EXCELLENCE** *Session Chairs: Jason Abbott & Emma Readman*	*CONFERENCE HALL 1, 2 & 3*
	Welcome	
	What are we Evolving Towards in Gynaecological Surgery? - **Pietro Santulli**	
	The Evolving O&G Labour Force: Does it Lead to Excellence? - **Michael Permezel**	
	WHO: A Global Perspective on the Evolution of Surgery - **Amanda Baric**	
	KEYNOTE: Surgical Evolution: Rocketing Forward with Surgical Videos - **Ted Lee**	
	Hysterectomy: Done in a Day! - **Barbara Levy**	
	The Robot: Are We There Yet? - **Arnold Advincula**	
	AAGL EXCHANGE LECTURE: Uterine Transplantation - **Shailesh Puntambekar**	
1000 - 1030	MORNING TEA, TRADE EXHIBITION & DIGITAL COMMUNICATIONS	PROMENADE FOYER & BALLROOM
1030 - 1215	**SESSION 2: PAIN AND PROGRESS** *Session Chairs: Peter Maher & Marilla Druitt*	*CONFERENCE HALL 1, 2 & 3*
	KEYNOTE: Bowel Resection for DIE: What is the Verdict? - **Pietro Santulli**	
	Is it Pelvic Pain or is it Endometriosis? - **Krishnan Karthigasu**	
	Chronic Pelvic Pain: A Neuromodulation Approach - **Frank Buchanan**	
	Dyspareunia: Find the Sore Spot! - **Prathima Chowdary**	
	Mild Endometriosis: Is it Really a Problem? - **Luk Rombauts**	
	Panel Discussion	
1215 - 1315	LUNCH, TRADE EXHIBITION & DIGITAL COMMUNICATIONS	PROMENADE FOYER & BALLROOM
1315 - 1530	**SESSION 3: FREE COMMUNICATIONS: CHAIRMAN'S CHOICE** *Session Chairs: Krish Karthigasu & Alan Lam*	*CONFERENCE HALL 1, 2 & 3*
1530 - 1600	AFTERNOON TEA, TRADE EXHIBITION & DIGITAL COMMUNICATIONS	PROMENADE FOYER & BALLROOM

1600 - 1720	**CONCURRENT SESSION 4A: FAST AND FURIOUS I - THE HYSTEROSCOPE EVOLVES** *Session Chairs: Stuart Salfinger & Bassem Gerges* *CONFERENCE HALL 1*	**CONCURRENT SESSION 4B: FAST AND FURIOUS II - UPDATES IN GYNAECOLOGY** *Session Chairs: Rachel Green & Harry Merkur* *CONFERENCE HALL 2&3*
	Can We Find Our Niche? **Ben Mol**	HRT: The Hormones for Now? **Elizabeth Farrell**
	Polyps: Blind no More **Simon Edmonds**	Where has my Pap Smear Gone? **Annabelle Farnsworth**
	Ablation and the New Burn **Lenore Ellett**	Hormones and Headaches: Can they Get Along? **Christina Sun-Edelstein**
	Submucous Fibroids: Should We Treat Them All? **Jason Abbott**	Clomid: Ovulation for Everyone **Kate McIlwaine**
	Complications of Hysteroscopy: How Much of a Problem is it Anyway? **Emma Readman**	Fe Therapy: The New Wonder Tonic? **Kirsten Herbert**
	Palm Coein: Does it Solve my HMB? **Rebecca Szabo**	Complex Atypical Hyperplasia: A Way Forward **Kym Reid**
	What's Hot in Surgical Devices **Ted Lee**	Contraception: Things Have Changed **Beverley Vollenhoven**
	Panel Discussion	Panel Discussion
1720	Close of Day One	
1720 - 1830	Welcome Reception	PROMENADE FOYER & BALLROOM

Program correct at time of printing and subject to change without notice. Updates available on the AGES website.

FRIDAY 9TH MARCH 2018

0730 - 0800	Conference Registration		PROMENADE FOYER
0800 - 1045	**SESSION 5: LIVE SURGERY** *Session Chairs: Haider Najjar & Danny Chou* *CONFERENCE HALL 1, 2 & 3*	0730 - 0830 Interactive Hubs 1 0830 - 0930 Interactive Hubs 2 0930 - 1030 Interactive Hubs 3	PROMENADE FOYER & BALLROOM
1045 - 1115	MORNING TEA, TRADE EXHIBITION & DIGITAL COMMUNICATIONS		PROMENADE FOYER & BALLROOM
1115-1245	**CONCURRENT SESSION 6A: FREE COMMUNICATIONS** *Session Chairs: Martin Healey & Prathima Chowdary* *CONFERENCE HALL 1*	**CONCURRENT SESSION 6B: FREE COMMUNICATIONS** *Session Chairs: Tom Manley & Supuni Kapurubandara* *CONFERENCE HALL 2&3*	**CONCURRENT SESSION 6C: FREE COMMUNICATIONS** *Session Chairs: Anbu Anpalagan & Amani Harris* *M11*
1245 - 1415	LUNCH, TRADE EXHIBITION & DIGITAL COMMUNICATIONS		PROMENADE FOYER & BALLROOM
1315 - 1415	Interactive Hubs 4		PROMENADE FOYER & BALLROOM
1415 - 1600	**CONCURRENT SESSION 7A: FIBROIDS OF THE FUTURE** *Session Chairs: Michael Wynn-Williams & Lenore Ellett* *CONFERENCE HALL 1*	**CONCURRENT SESSION 7B: ADENOMYOSIS AND SURGICAL REFLECTION** *Session Chairs: Robert O'Shea & Alex Ades* *CONFERENCE HALL 2&3*	
	Fibroids: Does Size Matter? **Barbara Levy**	TED Talk **Peter Maher**	
	Specimen Retrieval: It's in the Bag (Or is it?) **Amani Harris**	Adenomyosis: From Classification to Conception **Martin Healey**	
	Fibroids, Fertility and the Fetus: What Happens Post Treatment? **Michael Rasmussen**	Adenomyomas: Hot Tips and Surgical Tricks **Stephen Lyons**	
	Medical Management of Fibroids: Did Someone Say SPERM? **Jim Tsaltas**	"That's Not A Knife!" Non-Surgical Management of Adenomyosis **Catarina Ang**	
	Minimally Invasive Techniques **Jade Acton**	The Many Faces of Adenomyosis - How Medical Imaging can Assist the Gynaecologist **Kate Stone & Natalie Yang**	
	Fibroid Surgery: The Old Versus the New **Lionel Reyftmann**	Surgical Education: Evolution or Revolution? **Kym Jansen**	
	Panel Discussion	Panel Discussion	
1600 - 1630	AFTERNOON TEA & TRADE EXHIBITION		PROMENADE FOYER & BALLROOM
1630 - 1700	**SESSION 8: KEYNOTE PRESENTATIONS** *Session Chair: Jim Tsaltas* — *CONFERENCE HALL 1, 2 & 3*		
	Dan O'Connor Perpetual Lecture - Gynaecological Surgery: The Evolution Towards Excellence - **Tom Jobling**		
1700	Close of Day Two		
1700 - 1800	AGES AGM		M11
1900 - 2230	AGES Annual Black Tie Gala Dinner, Awards & Charity Auction		RIVER ROOM, CROWN TOWERS

Social Program

Welcome Reception
Promenade Foyer
Thursday 8th March 2018
5.20pm – 6.30pm

Black Tie Gala Dinner
River Room, Crown Towers
Friday 9th March 2018
7.00pm - late
Ticket cost: **$145.00**

SATURDAY 10TH MARCH 2018

0700 - 0745	Breakfast session: Women in Surgery: Not Just Lucky	M11
0730 - 0800	Conference Registration	PROMENADE FOYER
0800 - 0930	**CONCURRENT SESSION 9A: HOW CAN I MAKE MY PRACTICE EXCELLENT?** *Session Chairs: Ajay Rane & Ossie Petrucco* *CONFERENCE HALL 1*	**CONCURRENT SESSION 9B: OBESITY AND SURGERY** *Session Chairs: Kate McIlwaine & Fariba Behnia-Willison* *CONFERENCE HALL 2&3*
	Publish or Perish? Just Write **Paul Cohen**	Obesity Surgery: Any Tricks Up Your Sleeve? **Liang Low**
	Show Me the Numbers: A Guide to Statistics and Paper Analysis **Gary Frishman**	Surgery: Success When There's Excess **Adam Pendlebury**
	Evolution of the Modern Practice: Get Your Head out of the Cloud, let the Genie out of the Bottle **Michael Wynn-Williams**	Bitten off More than you can Chew? An Endocrinologists Approach **Cilla Haywood**
	Protecting your Private Parts **Anusch Yazdani**	PCOS: Too Many Eggs in my Basket **Rachael Knight**
	SurgicalPerformance: How are We Doing? **Andreas Obermair**	Large Problems on the Labour Ward **Rachel Green**
	Panel Discussion	Panel Discussion
0930 - 1000	MORNING TEA & TRADE EXHIBITION	PROMENADE FOYER & BALLROOM
1000 - 1145	**SESSION 10: EXCELLENCE IN HYSTERECTOMY** *Session Chairs: Haider Najjar & Simon Edmonds* — *CONFERENCE HALL 1, 2 & 3*	
	KEYNOTE: Vaginal Hysterectomy: Back to the Future - **Barbara Levy**	
	Laparoscopic Hysterectomy: There's More than One Way - **Ted Lee**	
	Hysterectomy: Who Should be Doing It? - **Stuart Salfinger**	
	Pain Relief for Hysterectomy **Mark Alter**	
	Global Trends in Hysterectomy - **Pietro Santulli**	
	Panel Discussion	
1145 - 1245	**SESSION 11: PRESIDENT'S PANEL** *Session Chair: Emma Readman* *Panel: Jamila Rizvi, Debra Nestel, & Jason Abbott* — *CONFERENCE HALL 1, 2 & 3*	
	Barriers to Excellence: How do we Evolve	
1245 - 1315	LUNCH & CLOSE OF CONFERENCE	CONFERENCE HALL FOYER

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Prizes & Awards

Best Free Communications Presentation
Sponsored by Medtronic

Outstanding New Presenter
Sponsored by Ethicon

Outstanding Video Presentation
Sponsored by Device Technologies

Outstanding Trainee Presentation - The Platinum Laparoscope Award
Sponsored by Stryker

Best Digital Communications Presentation
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AGES Travelling Fellowship 2018
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AGES-AAGL Exchange Lecture
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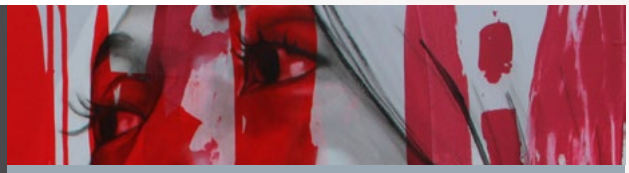

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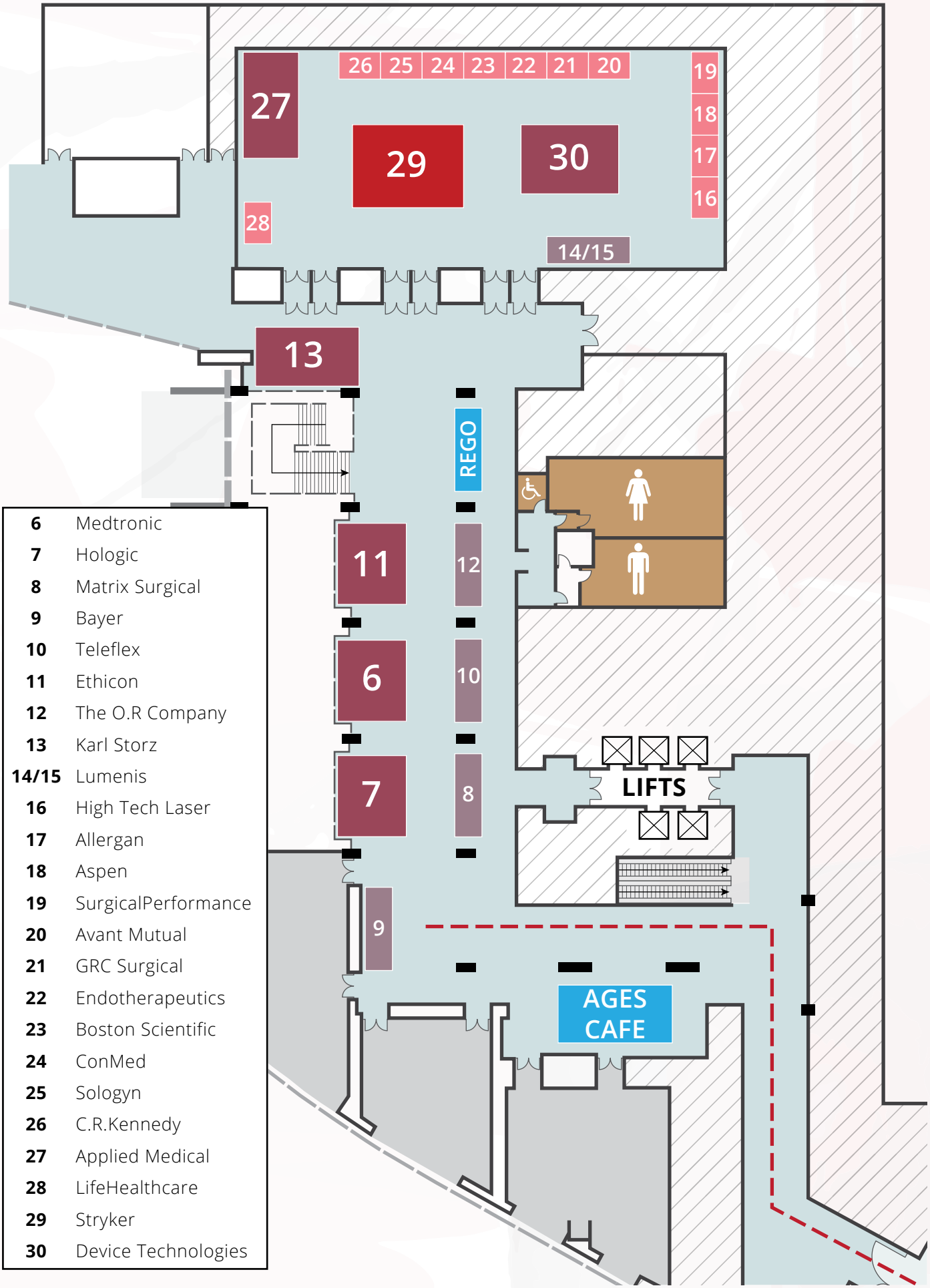
SCIENTIFIC SESSIONS
HERE
TRADE EXHIBITION
TRADE EXHIBITION
LIFTS
CROWN CASINO
CCH1
CCH2&3
ESCALATORS
LIFTS
DOWN TO
TRADE EXHIBITION
CROWN CONFERENCE CENTRE
LEVEL 2
M14
M11
M12
M13
ESCALATORS
LIFTS
UP TO MEETING ROOMS
CCH1, 2 & 3
CROWN CASINO
CROWN METROPOL
CROWN CONFERENCE CENTRE
LEVEL 1

FLOOR PLAN

TRADE EXHIBITION



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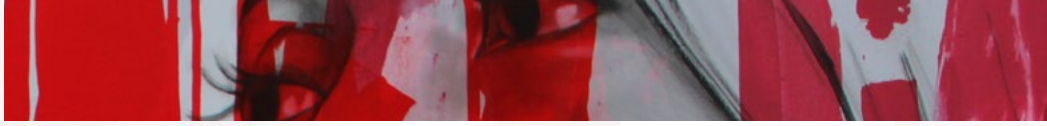
27	Applied Medical
28	LifeHealthcare
29	Stryker
30	Device Technologies



AGES Interactive Hubs

Interactive Hub sessions will be held during the ASM on Friday, 9th March at 7.30am, 8.30am, 9.30am & 1.15pm. Please see below full details of each Hub:

stryker

This interactive hub will look at future technologies in the operating theatre. The stations will range from how theatres are designed using MicroSoft's HoloLens technology, new capabilities and troubleshooting of endoscopic camera systems and virtual reality laparoscopic trainers. This hub will showcase the latest technology to improve your surgical skills and theatre efficiency.

Medtronic

Further, Together

The goal of the Medtronic Interactive Hub is to improve patient outcomes, by assisting Gynaecologists to stay informed of advances in technology and clinical practice.
Our skill enablement sessions will offer:

- The differences between and benefits of monopolar, advanced vessel sealing and ultrasonic technologies.
- Best practices for avoiding electrosurgical injury.
- The mechanics of laparoscopic suturing with curved needles.
- The mechanics of intracorporeal and extracorporeal knot tying.

The sessions will also enable participants to identify the potential benefits, risks and challenges associated with the performance of Total Laparoscopic Hysterectomy procedures. Members are invited to register for the Medtronic Interactive Hub which will be facilitated by key ANZ proctor surgeons.

FACULTY
Stuart Salfinger
Jade Acton
Mark Ruff

Applied Medical

A New Generation Medical Device Company

The next revolution in contained tissue extraction and safe establishment of pneumoperitoneum

Gynaecologists who wish to explore minimally invasive techniques for contained specimen extraction and safe establishment of pneumoperitoneum are invited to join esteemed Faculty for an evidence based discussion and hands-on skills session utilising some of the most advanced training platforms available. Learn how recent innovations may optimise clinical outcomes for patients, including; Patient selection; Instrumentation; Technique; and; Tips & tricks.

FACULTY
Russell Land
Greg Robertson
Sarah Choi
Luke McLindon

DEVICE TECHNOLOGIES

Device Technologies is pleased to be hosting an interactive da Vinci Surgery Hub, supported by the esteemed Dr Arnold Advincula, a world leading robotic Gynaecologist. The Hub will provide delegates the opportunity to:

- Gain exposure to da Vinci surgery through surgical skill simulation
- Gain exposure to da Vinci Xi docking techniques
- To undertake a dry lab including vaginal cuff model suturing
- Review a da Vinci Surgery procedure with Dr Advincula

We invite you to register for this opportunity to learn from an expert minimally invasive, robotic surgeon.

FACULTY
Arnold Advincula
Alan Lam

HOLOGIC

The Science of Sure

The Hologic Hysteroscopic Training Hub will consist of two simulators, for both the NovaSure® Endometrial Ablation system and MyoSure® Hysteroscopic Tissue Removal device. There will also be two hysteroscopic tower stations, allowing participants the opportunity to utilise the new MyoSure Manual Device, which is being unveiled at the AGES conference. The MyoSure Manual is an all-inclusive, and integrated tissue removal device, not requiring an external power source, vacuum or tissue specimen trap. It has been designed to take the complexity out of routine hysteroscopic tissue removal.

FACULTY
Kate McIlwaine

ETHICON

Delegates will receive access to an online App from Johnson & Johnson Medical with informative material on Laparoscopic skills and suturing. By attending the AGES Interactive hub, they will receive a one hour Non- didactic session facilitated by faculty, who will focus on the application of the pre-learning material. Post attendance the delegates will be able to attend another session at a state level where they can increase their skills in Laparoscopic surgery.

Resources to be loaded on Med J app; Load and Introduce the Needle; Needle Positioning: Tissue Penetration; Rosser Interrupted Technique; Szabo Interrupted Technique; Managing Suture Tag Length; Tying High vs. Tying Low; Forehand to Backhand Stitch; Candy Cane Technique; Tying a Slip Knot

FACULTY
Alex Ades

STORZ

KARL STORZ — ENDOSKOPE

Minimally invasive surgery (MIS) places special demands on the medical training and further education of surgeons. KARL STORZ, one of the leading manufacturers in the MIS sector, is committed to providing its customers with optimum support for medical training and further education.

The KARL STORZ interactive hub will enable participants to work with a range of quality instruments on various models and animal specimens to improve their confidence and skills in the areas of Hysteroscopy, Bipolar Resection and to refine techniques on Morcellation. Lastly, participants will also have an opportunity to experience the latest virtual reality trainer.

FACULTY
Scott Pearce
Amani Harris

Interactive Hub Faculty correct at time of printing and subject to change without notice.

SPONSORSHIP AND TRADE EXHIBITION

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Platinum Sponsor of AGES

Stryker is one of the world's leading medical technology companies and, together with our customers, is driven to make healthcare better. We offer innovative products and services in Orthopaedics, Medical and Surgical, and Neurotechnology and Spine that help improve patient and hospital outcomes.

AGES Educational Training Partner

As a global leader in medical technology, services and solutions, Medtronic improves the lives and health of millions of people each year. We use our deep clinical, therapeutic, and economic expertise to address the complex challenges faced by healthcare systems today. Let's take healthcare Further, Together.

Learn more at Medtronic.com.au.

Gold Sponsors of AGES 2018

Applied Medical is dedicated to developing and providing technologies that enable advanced surgical procedures and optimise patient outcomes. It is our mission to achieve this while also reducing healthcare costs and offering unrestricted choice. Applied is committed to advancing minimally invasive surgery by offering clinical solutions and sophisticated training, including workshops, symposia and our simulation-based training programs.
More recently, Applied has proudly introduced the Voyant® Intelligent Energy System which utilises a breakthrough technology to obtain a higher resolution view of the tissue as it changes, optimising the delivery of energy to create a permanent, fused seal. The Voyant 5mm Fusion, Open Fusion and Fine Fusion devices provide intelligent energy for a wide range of procedural needs. The intelligence of the Voyant system is uniquely embedded in the device key; allowing an unlimited potential for future instruments.

Gold Sponsors of AGES 2018

For over 25 years, Device Technologies has been pioneering possibility in the Australasian healthcare landscape – seeking out and bringing to market, some of the world's most advanced healthcare products. From high-quality consumables to advanced theatre equipment and robotics, Device Technologies is Australasia's largest independent provider of medical solutions and technologies. Partnering with the world's most innovative medical companies, we offer a comprehensive range of supplies with client care at the core of our values. Our dedicated team of over 650 highly skilled healthcare specialists and support staff, is committed to providing superior outcomes for healthcare professionals and their patients across the entire healthcare community.

Major Sponsors of AGES 2018

Johnson & Johnson Medical Devices produces a range of innovative products and solutions used primarily by healthcare professionals in the fields of gynaecology, orthopaedics, neurovascular, surgery, vision care, diabetes care, infection prevention, cardiovascular disease, sports medicine, oncology and aesthetics.

Johnson & Johnson Medical Devices believes that innovation is critical to our mission of caring and saving lives. We are uniquely positioned to lead the advancement of health care delivery by developing customer-focused solutions and collaborating to bring innovation to life. We believe this will help us to develop new products and total solutions for patients and health care providers. Locally, we embrace innovation through local partnerships and programs that help shape the medical technology industry. Our innovation activities harness the expertise of industry and community peers, with the strong belief that together, we are stronger.

Johnson & Johnson Medical Devices is part of the Johnson & Johnson Family of Companies, the largest and most diversified healthcare company in the world.

Major Sponsors of AGES 2018

Hologic, Inc. is a leading developer, manufacturer and supplier of premium diagnostic products, medical imaging systems and surgical products. The Company's core business units focus on diagnostics, breast health, GYN surgical, and skeletal health. With a unified suite of technologies and a robust research and development program, Hologic is dedicated to The Science of Sure. For more information on Hologic, visit www.hologic.com.

Contact details:
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Major Sponsors of AGES 2018

Since its beginnings in 1945, KARL STORZ has established itself worldwide as an international and highly regarded company in the production and sale of endoscopic devices, documentation and cameras. KARL STORZ Endoscopy Australia is a wholly owned affiliate of KARL STORZ GmbH and the parent company remains owned by the STORZ family. The majority of manufacturing is carried out in Tuttlingen, Germany where the art of instrument making is alive and well.

We will proudly be exhibiting the KARL STORZ range of instruments which will include the latest Hysteroscopes, Bipolar Resection, Uterine Manipulators, and Clicklines for laparoscopic procedures, plus endoscopic camera systems.

Visit the KARL STORZ booth with interactive hub for some hands-on experience and talk to the experts to find out more about the complete KARL STORZ range.

Professional Development Alliance Partner

Avant, a member-owned organisation, has a proud heritage of protecting the Australian medical profession that spans 123 years. Established by a small group of doctors as a mutual in 1893, Avant is now Australia's leading medical defence organisation, representing 72,000 healthcare practitioners and students across the country.

DOUBLE EXHIBITORS	SINGLE EXHIBITORS	
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Teleflex	GRC Surgical	High Tech Laser
The O.R Company	LifeHealthcare	Sologyn

WOMEN IN SURGERY - *NOT JUST LUCKY*

HOSTED BY JAMILA RIZVI

Saturday 10th March 2018
0700 - 0745

Let's keep the momentum going! Following on from our sold out Women's Breakfast at the 2017 ASM in Sydney, AGES is proud to present Jamila Rizvi, author, presenter and political commentator.

Described as one of the preeminent voices of young Australian women online, Jamila injects her own special brand of humour, irreverence, and authenticity into the public debate. Jamila has just published a book, Not Just Lucky, about the barriers to women in the workforce and is here to give us her take on women in surgery, and other workforce issues.

Jamila has been privy to the highest level of politics in the land, working for Kevin Rudd and Kate Ellis, is the former Editor in Chief for Mamamia Women's Network websites, and appears regularly on The Project, The Drum, and ABC News Breakfast. Jamila is also host of 'The Schmunday Show' on Fox FM, Melbourne.

In 2014 Jamila was named one of Cosmopolitan's 30 Most Successful Women Under 30 and in 2015, was listed as one of Australia's 100 Women of Influence by the Australian Financial Review. In 2017 she was included in the Weekly Review's top ten list of young rising stars in Melbourne.

Jamila has a unique voice on the issues related to women in the workforce. Come one and all to spend a refreshing breakfast in conversation with Jamila.

Don't forget to join Jamila Rizvi, Debra Nestel and Jason Abbott on the President's Panel

PRESIDENT'S PANEL

SESSION 11

Session Chair: **Emma Readman**
Panel: **Jamila Rizvi, Debra Nestel, and Jason Abbott**

Saturday 10th March, 1145 - 1245

AVANT - *BREAKFAST SESSION*

WHAT TO DO WHEN IT'S NEW: INNOVATION IN MEDICINE

Steve Jobs said innovation distinguishes between a leader and a follower. The challenge with innovation in medicine is balancing the ability to offer your patients the best procedure available, which may be a new intervention but doing it in a way that is evidence-based and minimises risk. This discussion will explore these issues from an ethical, medico-legal and clinical perspective.

Thursday 8th March 2018, 0700 - 0745

The Pelvic Floor Symposium 2018 program is available at the reigistration desk.

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LIVE SURGERY

BROADCASTED LIVE FROM MONASH MEDICAL CENTRE

SURGEONS:
Dr Jim Tsaltas, Dr Stuart Salfinger, Dr Tom Manley & Dr Amani Harris

The Live Surgery session has made a comeback this year! The enthusiastic response to these events is always evident by the attendance in the room despite it being the first session of the morning!

This year, the Live Surgery brings to the stage solutions for exposure, tips and tricks and visualisation of pelvic sidewall anatomy at laparoscopic hysterectomy and myomectomy. Watch these laparoscopic surgeons at Monash demonstrate techniques to dissect the ureter, safely reflect the bladder while displaying steps used in cases of scarring. Uterine manipulation and vault closure will be displayed and discussed. A systematic step by step approach to laparoscopic myomectomy with in bag specimen retrieval will also be presented.

The aim is to demonstrate reproducible surgical principles and techniques used in the approach to a challenging laparoscopic hysterectomy and myomectomy with an accompanying large fibroid uterus. We will also address some typical fibroid challenges such as reducing intraoperative blood loss, myometrial closure and removing the large specimen with discussions surrounding controversial issues, technologies and medications used.

This session will provide an exceptional opportunity to increase ones repertoire of minimally invasive techniques for laparoscopic hysterectomy and myomectomy in an engaging and interactive environment.

Friday 9th March 2018, 0800 - 1045

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FREE COMMUNICATIONS

SESSION 3: FREE COMMUNICATIONS: CHAIRMAN'S CHOICE
THURSDAY 8TH MARCH
1315 – 1530
CONFERENCE HALL

Jason Abbott
Endometriosis fertility index (EFI) predicts pregnancy rates following surgical resection of moderate and severe endometriosis

Mominah Bhatti
Pelvic examination may be meaningfully taught to novices and be used to predict operating times for laparoscopic excision of endometriosis in one surgical procedure

Thea Bowler
Being a better surgeon: Experiences of Trainees in the AGES Accredited Advanced Training Programs in Endoscopic Surgery

Prathima Chowdary
Will Whole Genome Sequencing save the Morcellator?

Uri Dior
Skin Preparation for Surgical-Site Antisepsis in Gynaecological Laparoscopic Surgeries: Preliminary results of A Double Blinded Randomised Controlled Trial

Uri Dior
Pelvic Organ Function after Laparoscopic Surgery for Deep Infiltrating Endometriosis: Interim Results of a Prospective Study

Sarah Holdsworth-Carson
Sonographic Evidence of Adenomyosis in Patients Undergoing Surgery for Investigation of Pelvic Pain

Stephanie Jackson
Use of a multimedia module to aid junior doctors' knowledge to consent patients for Total Laparoscopic Hysterectomy: A randomised controlled trial

Erin Nesbitt-Hawes
Levator morphometry in women with pelvic pain

Erin Nesbitt-Hawes
Re-intervention after hysteroscopic morcellation

Keisuke Tanaka
Incidence of adverse events in gynaecological hospital admissions: A systematic review

Erin Wilson
Surgery at home: Can portable laparoscopic simulators improve the skills of gynaecology trainees?

Anusch Yazdani
To become a better surgeon: Why Trainees enter Advanced Training Programs in Endoscopic Surgery

SESSION 6A: FREE COMMUNICATIONS: ORAL PRESENTATIONS
FRIDAY 9TH MARCH
1115 – 1245
CONFERENCE HALL 1

Annabelle Brennan
Magnetic resonance-guided focused ultrasound surgery (MRgFUS): A minimally invasive approach to managing symptomatic leiomyomas and its potential role in pre-operative optimisation of the surgical candidate

Alison Bryant-Smith
Could the European Academy of Gynaecological Surgery's diploma of minimally invasive gynaecological surgery become a new model for standardised laparoscopic simulation training in Australia and New Zealand?

Rebecca Deans
Perfusion MRI in Asherman syndrome

Amy Feng
Medical management of Tubo ovarian abscess (TOA): Are we failing patients by avoiding surgery?

Gemma Ferguson
Subsequent Laparoscopy in patients receiving adjuvant hormonal therapy after Laparoscopic Excisional Surgery for Endometriosis

Shamen Gunawardena
New Diagnosis of Endometriosis Less Likely in Women over Age Forty Presenting with Pelvic Pain

Monica Koening
An audit of women with acquired uterine arteriovenous malformations at the Royal Women's Hospital (2010-2016)

Charlotte Reddington
Management and Outcomes of Atypical Endometrial Hyperplasia: Should we perform bilateral oophorectomy at hysterectomy? And what are the outcomes of progesterone use?

Anusch Yazdani
From Cave Paintings to Robotics: Establishment of Endoscopic Surgery in Australia

SESSION 6B: FREE COMMUNICATIONS: ORAL PRESENTATIONS
FRIDAY 9TH MARCH
1115 – 1245
CONFERENCE HALL 2&3

Aina Kuk & Bolorjargal Erdenebileg
AGES Global Gynaecology Scholarship Presentation

Jessica Lowe
Feasibility of incorporating the Standard Surgical Form (SSF) into clinical practice and implications for advancing endometriosis research - a prospective observational study

Ushmi Chatterjee
Enhanced recovery after laparoscopic hysterectomy: A comparison of ERAS and conventional models of surgical care in a tertiary gynaecology unit

Rachel Collings
Effect of surgical treatment of endometriosis on bladder pain syndrome: a prospective cohort study

Amy Fitzgerald
Perceptions and barriers to optimising laparoscopic ergonomics during minimally invasive surgery in gynaecology

Christine Foster
Major Complications associated with over 1500 operative laparoscopies: a prospective multicenter observational study

Violet Kieu
The operating theatre as classroom: a qualitative study of learning and teaching surgical competencies

Kiran Vanza
Is Laparoscopic Nerve Sparing Surgery for Deep Infiltrating Endometriosis Essential to minimise lower urinary tract and bowel dysfunction?

Mike Zhang
Non-malignant Sequelae Following Uncontained Power Morcellation

SESSION 6C: FREE COMMUNICATIONS: VIDEO PRESENTATIONS
FRIDAY 9TH MARCH
1115 – 1245
M11

Sarah Choi
Laparoscopic discoid resection of rectal deeply infiltrative endometriosis nodule - Retroperitoneal anatomy of pararectal and retrorectal spaces in nerve-sparing endometriosis surgery

Dean Conrad
Retropubic tension free vaginal tape insertion under laparoscopic vision

Dean Conrad
Laparoscopic repair of caesarean scar defect

Amy Goh
Hanging by a Thread: Uterosacral Ligament Suspension

Stephen Lee
Laparoscopic uterine artery ligation prior to removal of Caesarean scar ectopic pregnancy to minimise blood loss

Justin Lam
Multi-disciplinary management of deep infiltrative endometriosis causing ureteric obstruction and hydronephrosis using DaVinci Robotic surgery for resection and uretero-vesical re-implanation with Psoas hitch

Rose McDonnell
Indocyanine Green for Sentinel Lymph Node Mapping in uterine cancer: video presentation

Tal Saar
Parasitic leiomyoma: a case report

Jessica Lowe
Pushing the limits of robotic surgery for removal of massive fibroid

DIGITAL COMMUNICATIONS EXHIBITION AREA

THURSDAY MORNING TEA, 1000-1030

Lima Arsala
Laparoscopic cystectomy during pregnancy - optimising risky surgery

Joseph Boustany
Anti-N-methyl-D-aspartate receptor (anti-NMDAR) encephalitis associated with ovarian teratoma: Case report and review of the literature.

Alison Bryant-Smith
Build it, and they still won't come: how to motivate gynaecology trainees to make the most of laparoscopic simulation training opportunities

Karen Chan
Recurrent bilateral mature teratomas with gliomatosis peritonei in pregnancy

THURSDAY LUNCH, 1215-1315

Brendan Crossley
Endometriosis with recurrent massive ascites and pleural effusion: a rare clinical presentation

Shamen Gunawardena
Beta HCG levels and Mean Sac Diameter Can Predict Conversion to Surgical Management of Cesarean Scar Ectopic Pregnancies

How Chuan Han
The MiniArc Sling System for Female Stress Urinary Incontinence – 2-year outcomes

Keryn Harlow
Prolapse Management: From the Top or the Bottom? Recurrence of pelvic organ prolapse at 12 months following vaginal or laparoscopic hysterectomy

Cherynne Johansson
A Novel Technique for Management of Ureteric Injury

Cherynne Johansson
Laparoscopic Management of Bilateral Brenner Tumour of the Ovary: A Case Report

Justin Lam
A case of a concealed deep endometriotic nodule causing persistent pelvic pain despite multiple previous surgeries to treat endometriosis

Rilka Lee
Uterovesical Ectopic Ovary - A case report and review of the literature

Sandra Lin
Clear cell carcinoma in ovarian endometrioma with concurrent astrocytoma

Rosie McBain
Interstitial Ectopic Pregnancy: A Laparoscopic Approach

THURSDAY AFTERNOON TEA, 1530-1600

Rose McDonnell
Laparoscopic hysterectomy complications: lessons learnt

Monica McGauran
Adnexal abscess: tubo-ovarian or appendiceal in origin?

Andrew McIntyre
Lateral thinking: management of vaginal sulcus perforation with a transobturator sling

Hugh O'Connor
Operative management of rectovaginal endometriosis at a large tertiary referral unit

FRIDAY MORNING TEA, 1045-1115

Sathana Ponnampalam
Severe prolonged chemical peritonitis caused by intra-operative rupture of a dermoid cyst during a laparoscopic ovarian cystectomy: a case report

Lucy Richards
Laparoscopic Treatment of Residual Ovary Syndrome

Sara Salehi
Leiomyomas And The Decision To Power Morcellate

Siew Pei Goh
Jelly-belly

FRIDAY LUNCH, 1245-1415

Jennifer Pontre
Case Series and Surgical Video Presentation: Combined Laparoscopic and Cystoscopic Partial Cystectomy for Excision of Deeply Infiltrating Bladder Endometriosis

Jennifer Pontre
The Cumulative Success of Ovulation Induction Therapy with Gonadotrophins in Therapy Naïve Anovulatory Women?

Nili Raz
Comparison between vaginal and laparoscopic sacrocolpopexy – clinical outcomes.

Nili Raz
Is there a difference between Chlamydia Trachomatis\Neisseria Gonorrhoeae-positive and negative pelvic inflammatory disease? - A case control study

Stanley Santiagu
Trophoblastic Tissue At Total Laparoscopic Hysterectomy?!

Toni Tse
Pre-operative diagnosis of benign versus malignant uterine mass: Case report and review of available pre-operative investigations

Kate Tyson
A Combined Cystoscopic and Laparoscopic Approach of Excision of a Nodule of Endometriosis within the Urinary Bladder

Kiran Vanza
Medium to long-term gastrointestinal outcomes following segmental bowel resection for deep invasive endometriosis

Saima Wani
Rare sequelae of tubo-ovarian abscess and subacute bowel obstruction following spontaneous necrosis of a submucosal fibroid

Madeleine Ward
Single incision laparoscopic myomectomy with manual morecellation utilising a tissue extraction containment system

James Pak Guan Wong
B-Lynch Suture: Is it Truely Fertility Preserving? Uterine Rupture in 2nd Trimester Post Previous B-Lynch suture: A Case Report

Sara Yeoh
Laparoscopic excision of bladder endometriosis and partial cystectomy

Cheryl Yim
Uterine carcinosarcoma: treatment and outcomes over 23 years

All awards will be presented at the AGES Annual Black Tie Gala Dinner, Awards & Charity Auction, to purchase a ticket please visit the registration desk

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- Eligibility to apply for a position in the AGES Training Program in Gynaecological Endoscopy

AGES Art Prize & Charity Auction

AGES is pleased to announce Carrie Pitcher as the 2017/2018 AGES Society Art Prize winner.

Carrie Pitcher is an emerging contemporary artist based in Melbourne, notable for her portraits, which are at once both representational and abstract.

Working with acrylic on canvas, she marries abstract expressionism: swathes of bold colour, and opportunistic mark making, with the narrative of the portrait.

Close-cropped composition and sheer scale create a feeling of intimacy, while layer upon layer of abstract colour impart dynamic energy as if projected across the motif—chosen for a particular quality that engages the artist's aesthetic sensibility.

Exploring themes of feminine dynamism and identity, the figurative and the abstract are brought together in a body of work that expresses an undefined personal significance, an extension of the artist herself.

Carrie's artworks have been distributed through various print media to a circulation of more than 6,000 doctors and health professionals.

The artworks will be auctioned off at the AGES Annual Black Tie Charity Auction & Awards Gala Dinner on Friday, 9th March 2018 at River Room, Crown Towers.

The proceeds of the Charity Auction will be donated to the Charity:
Share the Dignity, www.sharethedignity.com.au

We do hope that you are able to join us on this vibrant night. To register for the AGES ASM 2018, purchase a ticket for the Black Tie Gala Dinner and to participate in the charity auction, please visit www.ages.com.au/events

For more information please visit the website – *www.ages.com.au*



AGES is pleased to announce the winner of the AGES Society Art Prize for 2018 is ***Shannon Hamilton***

PROGRAM ABSTRACTS

THURSDAY MARCH 8

SESSION 1: SURGICAL EVOLUTION TO EXCELLENCE / 0800-1000

What are We Evolving Towards in Gynaecological Surgery?

Pietro Santulli, L Marcellin, C Maignien, M Bourdon, B Borghese, C Chapron

Université Paris Descartes, Sorbone Paris Cité, Faculté de Médecine, Assistance Publique – Hôpitaux de Paris (AP- HP), Groupe Hospitalier Universitaire (GHU) Ouest, Centre Hospitalier Universitaire (CHU) Cochin, Department of Gynecology Obstetrics II and Reproductive Medicine (Professor Chapron), Paris, France.

Over the past decade minimally invasive techniques in gynecologic surgery have widely spread across the world. In the future surgery will likely continue the trend towards such minimally invasive techniques to perform the least invasive technique to provide maximal surgical outcome with minimal disruption of the patient's life. Scientific advances that radically change clinical practice are coming at an accelerated speed. In the next years minimally invasive techniques will be improved by better preoperative imaging work up and intraoperative use of modern specifics devices to increase visibility and accessibility. In addition to surgical techniques improvement, invasive radiologic intervention and less invasive techniques such as hysteroscopic procedures and ablative techniques will lead to less invasive procedures, decreased costs and quicker patient recovery.

Furthermore new advances coming from assisted reproductive technologies, genetics, robotics, artificial intelligence, and molecular biology become helpful tools for both diagnosis and treatment. Such approaches would in the future help the practitioners to better select the surgical procedures. In addition to these advances, recent discoveries in basic science stem-cell therapies, suggest that, in the near future, advanced genetic therapies offer chance that genetic abnormalities or translational errors can be corrected and can cure diseases maybe reducing the need of invasive surgery.

Future trend in gynecological surgery will require compelling changes in training programs in order to assure furthers improvements in health care, quality control and patient safety.

The Evolving O&G Labour Force: Does it Lead to Excellence?

Michael Permezel

Obstetrics and gynaecology as a discipline is ever more complex and ever more demanding. Historically, the O&G Fellow self-selected by having parents able to afford a six year medical course, choosing a career in O&G (often without much competition) and undertaking a 3 or 4 year unstructured training program. This has now evolved to highly competitive entry into both medical school and then FRANZCOG training. Subspecialisation will lead to further competitive entry. The six year training program has continually evolved to meet the changing needs of women's health. The array of knowledge, skills and attributes is so vast that it is blatantly impossible to achieve 'excellence' across the entire discipline of O&G. The inevitable result has been the evolution of 'sub-specialisation' and more recently an increasing recognition of 'special interests' amongst the generalist O&G Fellows.

This drive toward greater and greater specialisation potentially results in an increasingly skilled workforce across smaller and smaller areas of practice. This risks a worsening of patient care as narrow scopes of practice result in reduced equity of access for patients and potentially poorer outcomes for the overall health of the patient.

The task of FRANZCOG training is to produce a product that achieves the best outcomes for women in Australia and New Zealand. That in turn means defining training pathways that result in scopes of practice that meet the needs of women – both quantitatively and qualitatively. Excellence is achieved in each pathway through: a) beginning training with the most suitable trainee; b) the trainee pathway itself; and c) continued professional development beyond training in that scope of practice.

WHO: A Global Perspective on the Evolution of Surgery

Amanda Baric

Over the past twenty years, global health has focused primarily on individual diseases. This has led to remarkable reductions in death and disability from certain conditions. However, these gains have not been mirrored by similar improvements to health systems, integration of services, and hospital-based care, nor have they been fairly distributed amongst people of all socioeconomic standings.

A growing body of evidence demonstrates a large unmet need for surgical obstetric and anaesthetic care in many low and middle-income countries.

In the absence of surgical care, case-fatality rates are high for common, easily treatable conditions including appendicitis, hernia, fractures, obstructed labour, and breast and cervical cancer.

The emergence of this data, along with a shift in global health policy from disease-specific interventions to a strengthening of health systems approach in the developing world have all supported the emergence of a new interest in surgery, obstetrics and anaesthesia as a global health priority.

2015 was a turning point for global surgery. The World Bank, and the World Health assembly recognized surgery as an essential area for health development. The Lancet commission released a report on Global Surgery that addressed 5 key areas to promote change including:

- Access to timely surgery
- Increasing surgical workforce and procedural capacity
- Increasing surgical volume
- Accurate collection of surgical data, including outcomes
- Financial protection for patients receiving surgical care

Governments must provide support and resources to deploy health care providers (midwives, doctors, and other skilled maternity care providers, including specialists) in adequate numbers to meet population needs. Likewise, country-level workforce management is necessary to ensure optimal recruitment, distribution and retention of health workers; as well as supportive supervision and task shifting as needed to improve access to care. Professional associations play an important role in establishing norms for the regulation of health care workers and setting professional standards for their education and core competencies.

Beyond governments and professional associations, to achieve universal access to safe, timely and affordable surgical care, we need commitment from individuals who are willing to engage in building capacity in low and middle-income countries. There are existing networks between individuals and groups who engage in this work that can become the avenue for further development.

We are not talking about mere service provision, but a commitment to the training and professional development of local obstetric, surgical and anaesthesia providers and the evolution toward sustainable systems for the delivery of care.

Training partnerships, mentorship and research support are some of the ways high-income country clinicians and academics can improve access to essential surgical care around the world. Members of AGES and similar organizations have commenced this work and we are approaching the stage where some of these partnerships can be formalized to strengthen these relationships and build on the important work that is already being done.

1. Meara JG, et al. Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. The Lancet, 2015;Volume 386, Issue 9993, 569 - 624
2. Ng-Kamstra JS, et al. Global Surgery 2030: a roadmap for high income country actors. BMJ Glob Health, Apr 2016, 1 (1) e000011; DOI: 10.1136/bmjgh-2015-000011

Surgical Evolution: Rocketing Forward with Surgical Videos

Ted Lee

Video based surgical education has become the most significant tool in teaching surgical techniques for learners of all level because of convenience of recording endoscopic surgery at the click of button. The ease of access to surgical video through internet via popular websites such YouTube, Vimeo as well as surgery specific websites such as SurgeryU and Websurg has further accelerate the transfer of knowledge. With the explosion of surgical videos online, it is important to examine the education value of surgical videos. This presentation will examine the essence of good video based surgical education through my presentation on “Maintaining and reclaiming Hemostasis: the Essence of Laparoscopic Surgical Dissection”

Hysterectomy: Done in a Day!

Barbara Levy

Minimally invasive surgical approaches to traditional operations have allowed surgeons to think creatively and question "the way we've always done things". This lecture will highlight the myths we've all believed regarding surgical management and recovery and evidence-based approaches to optimizing the patient experience.

Objectives:

Identify multimodal methods of pain management

Apply evidence-based principles to the care of post-operative patients

Become aware of barriers to rapid recovery

To incorporate best practices into pre-operative and post-operative care of gynecology patients

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The Robot: Are We There Yet?

Arnold Advincula

Since the advent of robot-assisted surgery in the early 2000's, this disruptive technology has revolutionized approaches to surgery across all specialties including gynecology where FDA approval was obtained in the spring of 2005. Although significant amounts of peer-reviewed data support the equivalency and at times superiority of robotics compared to the more conventional surgical routes, much debate over its use still exist in gynecology. A focus of much of this discussion in the USA has been around the issues of cost, training and a misguided understanding of value-based medicine. The following presentation will debunk myths surrounding the use of robotics in gynecologic surgery in the USA and in doing answer the question posed by elaborating on the truth of where we are with the robot.

AAGL EXCHANGE LECTURE: Uterine Transplantation

Shailesh Puntambekar

With the options for absolute Uterine factor infertility (AUFI) being either Surrogacy or adoption, Uterine Transplant has been able to open newer avenues in management of AUFI. Though in its very early stages it may soon in future bean established treatment option . Uterus transplant has its only aim being pregnancy is a unique type of tissue transplant. Being a non vital organ transplant which unlike most other transplants can removed once its purpose has been met. Minimally invasive techniques have been applied to various organ transplants like liver and kidney successfully and this to our knowledge is the first laparoscopic assisted uterus transplant.

A 12-member team was formed, and approval for transplant was obtained from the institutional review board. Pre-transplant, in vitro fertilization for both patients was done. Two consecutive uterine transplants were done on 2 successive days. Vessels were harvested laparoscopically in both donors. Uterus and harvested vessels were retrieved by a small abdominal incision to prevent injury and infection. The uterus was transplanted in the recipients by end to side anastomosis of the harvested vessels to external iliac vessels, followed by anchoring of supports of the donor uterus to those of the recipients. Surgical intra- and postoperative parameters, postoperative investigations, and follow-up data of 6 months were measured. Operative time for laparoscopic donor surgery was 4 hours. Bench surgery took 45 minutes. Recipient surgery time was 4 hours. There were no intraoperative or immediate postoperative complications. Both the recipients started menstruating after 34 days and 48 days, respectively, and have had 6 cycles of menses at regular intervals. Uterine artery Doppler showed good flow in both patients. Hysteroscopy-guided cervical biopsies were used as a method of surveillance of graft rejection after uterine transplant. Office hysteroscopy was done after 2 months in both patients, and hysteroscopy-guided endometrial and cervical biopsies were taken. Minimal slough was seen on the endometrium in the patient with Mayer-Rokitansky-Küster-Hauser syndrome, which was removed. Repeat hysteroscopy after 10 days showed a healthy endometrium.

Conclusion:Laparoscopic-assisted uterus donor retrieval is feasible and affords all the advantages of a minimally invasive technique, thereby reducing the morbidity of the procedure. It helps in better dissection of the vessels, shortens the operative time, and helps to minimize tissue handling of the harvested uterus and vessels.

SESSION 2: PAIN AND PROGRESS / 1030-1215

Bowel Resection for DIE: What is the Verdict?

Pietro Santulli, L Marcellin, C Maignien, B Bourdon, B Borghese, C Chapron

Université Paris Descartes, Sorbone Paris Cité, Faculté de Médecine, Assistance Publique – Hôpitaux de Paris (AP- HP), Groupe Hospitalier Universitaire (GHU) Ouest, Centre Hospitalier Universitaire (CHU) Cochin, Department of Gynecology Obstetrics II and Reproductive Medicine (Professor Chapron), Paris, France.

Endometriosis, is a public health issue that bears an important social burden. Endometriosis, histologically defined as functional endometrial glands and stroma developing outside of the uterine cavity is a common gynecologic disorder. Pathogenesis of endometriosis is enigmatic and remains controversial, even if retrograde menstruation seems the most probable mechanism for the development of the disease. Approximately 5–10% of reproductive-age women are affected by endometriosis, and at least one third of these are infertile. Symptoms vary widely, including dysmenorrhea, non-cyclic chronic pelvic pain, dyspareunia, and infertility, with a considerable negative impact on quality of life. Concerning the endometriotic lesions clinical appearance, there are three phenotypes: peritoneal superficial endometriosis (SUP), ovarian endometriosis (OMA) and deep infiltrating endometriosis (DIE). Adenomyosis is frequently encountered in association with endometriosis and may contribute to both painful symptoms and altered chances of spontaneous and assisted conception.

Deep endometriosis is actually considered the most severe form of endometriosis. DIE was previously arbitrarily defined as a peritoneal invasion over 5mm. Recently it was proposed that DIE should be defined by the involvement of the muscular layer of the organs around the uterus (bladder, uterus, ureter, ...). DIE is not a disease of a specific organ but represents rather a multifocal and heterogeneous disease requiring a multidisciplinary integrated approach. Pre-operative imaging work-up is essential. DIE nodules multifocality justifies a complete abdomino-pelvic work-up, because if surgery is decided, location of deep lesions governs the surgical procedure' choice.

For DIE patients, the choice between medical treatment, surgery and ART depends of numerous parameters: age, associated endometrioma and/or adenomyosis, intensity of painful symptoms, ovarian reserve, infertility with or without associated infertility factors, previous history of surgery for endometriosis, number and location of deep nodules ... Surgery is efficient, not only for managing pelvic pain and treatment of endometriosis-related infertility, but also for improving quality of life. Nevertheless, the benefits of surgery should not obscure the fact that interventions can be associated with adverse outcomes.

An important issue is that endometriosis has a high potential risk for recurrence which many reports have attributed to incomplete surgical procedures. One of the main question in the endometriosis surgical management is to know if it is a "real recurrence or persistence".

In case of deep infiltrating endometriosis, especially in case of intestinal involvement, surgery is not harmless and benefits of pain relief and spontaneous conception following surgery should be balanced with life threating surgical risk as fistula, peritonitis, bladder and intestinal dysfunctions and risk of disease recurrence. In addition in case of associated ovarian endometrioma, fears that surgery can alter ovarian function that is already compromised sparked a rule of no surgery before ART.

The respective advantages of surgery, medical treatment, and ART intertwine complexly in women with deep infiltrating endometriosis. This intricate medley mandates a global approach to optimise every option. Indeed, only such a strategy can oppose a situation that still too often prevails, when the main reason for choice of surgery or ART stems from the primary activity of the doctor who is first consulted.

Is it Pelvic Pain or is it Endometriosis?

Krishnan Karthigasu

In this lecture we discuss the interaction with Chronic Pelvic Pain and Endometriosis and if we can tell the difference. We look at the data regarding symptoms and whether it can help in diagnosing endometriosis as well as alternative diagnosis's as well as the prevalence of the disorders.

This talk looks at other factors that may affect the success of treatments for endometriosis and factors that may influence surgical and medical decision-making for the clinician.

Some tips to help in the management of the difficult combination of chronic pelvic pain and endometriosis and its associated pathology, particularly the non-physical/non-anatomical aspects and non-surgical aspects.

Dyspareunia: Find the Sore Spot!

Prathima Chowdary

Sexual pain in women is associated with significant morbidity and financial cost to the individual as well as their partners, families and the wider community. Chronic pelvic pain (CPP) is estimated to affect 15% of women aged 18-50 years[2]. There is a complex interplay of biological, behavioural, environmental and societal factors compounded by complex neurogenic innervation of closely related visceral and somatic structures, by the intimate nature of the area and impact on personal relationships and sexuality. Epidemiologic studies reveal a high community prevalence of chronic pelvic pain in women of reproductive age, with reported rates of 14.7 percent in the U.S.[2]

Once a diagnosis of possible pelvic floor dysfunction as a contribution to chronic pelvic pain is made, objective measurements and physiotherapy as a method of low-risk treatment is a logical, inexpensive and nonsurgical approach to treatment[3] . 85% of patients with chronic pelvic pain present with dysfunction or impairments of the musculoskeletal system – eg poor posture and pelvic floor muscle imbalances [1].

Pelvic floor muscle (PFM) pain and increased tension are commonly associated with pelvic, vulval and sexual pain presentations and is an emerging reason for referral to pelvic floor physiotherapy. The addition of biofeedback provides the patient with objective information regarding the adequacy of pelvic floor training and objective assessment of changes in the baseline tone and strength for the physician[3]. The relationship between the symptom of PFM pain and the sign of altered PFM tension is not well understood but co-occurrence is frequently observed with causality difficult to prove. These 'tissue-focused' interventions play an important role, however there is strong evidence for a biopsychosocial approach to management of persistent pelvic floor muscle pain due to the high prevalence of contributing psychological variables. Both peripheral and central abnormalities have been implicated in vulvar / sexual pain indicating central hypersensitivity and therefore an inherent need to address central nervous system dysfunction.

PFM dysfunction, mainly increased tension, plays a significant role in the maintenance and exacerbation of pelvic and sexual pain. Identification of a myofascial syndrome as a cause or contributing factor is a critical step in management of patients with chronic pelvic pain. Failure to recognise pelvic floor dysfunction could certainly contribute to the 24% to 40% negative laparoscopy rate in patients with chronic pelvic pain[8]. Attention to the pelvic floor musculature during pelvic examinations is an effective and inexpensive diagnostic strategy that can be life-changing for patients with pelvic pain, yet requires minimal time and effort.

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Mild Endometriosis: Is it Really a Problem?

Luk Rombauts

Minimal and mild endometriosis remain an enigmatic problem. In contrast with deep infiltrating endometriosis, the milder forms cannot be identified on imaging studies. There are also no reliable biomarkers yet to indicate that a woman has mild endometriosis and whether symptoms are present makes little or no difference. So, for now at least, a laparoscopy, an invasive surgical procedure, is still required to find out if someone has minimal or mild endometriosis.

This raises several questions. Is it reasonable to use a laparoscopy as a screening tool in women at risk (eg. significant family history)? How accurate is visual recognition of minimal or mild lesions during a diagnostic laparoscopy anyway? In the absence of suggestive lesions on MRI or TVUS, is it really in the best interest of the patient to have a diagnostic laparoscopy, even when symptoms are present?

It is known that many lesions seen in the milder forms of endometriosis have a reasonable likelihood of disappearing spontaneously. In this presentation we will take the opportunity to critically analyse the value proposition of the different treatment approaches, including expectant, surgical and medical management of symptomatic minimal and mild endometriosis.

SESSION 3: FREE COMMUNICATIONS: CHAIRMANS CHOICE / 1315-1530

Endometriosis fertility index (EFI) predicts pregnancy rates following surgical resection of moderate and severe endometriosis.

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Objective: To assess predictors of non-IVF live births after surgical management of severe endometriosis and provide external validation of the Endometriosis Fertility Index (EFI).

Design: Prospective observational study of 141 consecutive women who attempted to conceive after undergoing a fertility-preserving laparoscopic excision of stage III-IV endometriosis according to the American Society for Reproductive Medicine (ASRM) classification system (ethics approval ref.:09/120).

Materials and methods: Detailed operative reports and telephone follow-up were used to assess fertility outcomes and EFI score based on women's age, duration of infertility, previous pregnancy, least adnexal function score, and ASRM endometriosis and total score (maximum=10 points). Cox proportional hazards regression were used to identify predictive factors of live births.

Results: Mean participants' age was 33 years old with 35% having stage III and 65% stage IV endometriosis. Resection of endometrioma and bowel resection occurred in 47% and 4% of cases, respectively. Fifty-eight percent of participants had previously undergone a laparoscopy and 60% had a history of infertility. Median follow-up was 55 months. Cumulative non-IVF-live-birth rate was 45% and strongly associated with the EFI score (score 9-10: 68%, score 7-8: 54%, score 5-6: 24%, score 3-4: 11%, score 0-2: 0%, p<.001). Other factors positively associated with occurrence of live births were complete resection of disease (HR=2.33, p=.036) and no previous laparoscopy (HR=2.36, p<.001).

Conclusion: EFI is a reliable clinical tool to predict non-IVF conception after laparoscopic removal of severe endometriosis. First surgery and complete resection of endometriosis offer the best chance of success.

Pelvic examination may be meaningfully taught to novices and be used to predict operating times for laparoscopic excision of endometriosis in one surgical procedure

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Objective: To investigate whether pelvic examination may be meaningfully taught to novice medical students and its accuracy in predicting operating times for laparoscopic excision of endometriosis at a single surgical procedure.

Methods: Women with suspected endometriosis scheduled for laparoscopy underwent pelvic examination to estimate operative time by medical students (novices), trainees, senior clinicians with <10 years surgical experience (experts) and ≥10 years (masters). Examination and intraoperative findings were compared and stage of disease recorded.

Results: There were 138 estimations of operating time at the initial assessment and 251 estimations of operating time prior to surgery. The median surgical duration was 44 min (range 12–398) and increased progressively with revised American Society for Reproductive Medicine disease stage. Clinical predictions exceeded actual operating times by a median of 18 min (range overestimating by 180 min and underestimating by 120 min) with 80% of procedures completed in less time than predicted and none requiring a second procedure. There was no statistical difference in operative time estimations between the groups with students and trainees underestimating surgical duration by a median of two and five minutes, respectively, experts having a median time difference of zero minutes, and masters overestimating by 4.5 min.

Conclusion: Targeted pelvic examining may be taught to novices (medical students) and can be used to predict operating time at one surgical procedure. Less experienced examiners have a tendency to underestimate surgical duration, with masters overestimating surgical time when scheduling laparoscopies for endometriosis, and increasing disease stage is associated with a less precise estimation of surgical duration.

Being a better surgeon: Experiences of Trainees in the AGES Accredited Advanced Training Programs in Endoscopic Surgery

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The face of obstetrics and gynaecology is changing, driven by the reduction in inpatient length of stay, the increase in the total number of general specialists, an explosion of knowledge from advances in science and information technology, increasing patient education and an increased emphasis on life-work balance with a concomitant reduction in working hours. Specifically, the last 20 years have seen the rise of subspecialization to the point where almost one in three specialists pursue further subspecialist training according to the Workforce Intentions Survey.

The purpose of this study was to assess the progress of trainees in the AGES accredited advanced training program in endoscopic surgery.

Methodology

This study employed a mixed methods design. In March 2016 and 2017, semi-structured interviews were conducted of current trainees and graduates of the training program. Interview candidates were selected by exhaustive criterion sampling.

Training records of all trainees in the program were reviewed for final analysis.

Data analysis

Interview data were organised into categories and analysed by NVivo 10 and analytic induction in a staged, independent analysis. Units, themes and sub-themes were finalised and the data processed in a framework approach to data analysis. The validity of the qualitative data analysis and interpretation was established using traditional approaches in qualitative research including data triangulation.

Quantitative continuous and categorical data were subject to parametric, nonparametric and regression analysis where appropriate using SPSS Professional.

Ethics approval for this study was granted from Queensland University of Technology Human Research Ethics Committee (1500000108).

Results

In March 2017, all graduates of the AGES Training Program (13) were invited to participate in interviews, of which 6 agreed

and 4 attended the interviews. Further data was received from two graduates. The main themes identified in the study were autonomy, competency and professionalization.

Trainees are exceeding all surgical parameters, though there are significant regional variations.

Conclusion

Though there are a number of barriers, trainees emerge from the program with an increased skill set, increased experience but tempered by a greater understanding of their limitations. There is a greater understanding of other professional qualities, including the role of training, continued education and research.

Will Whole Genome Sequencing save the Morcellator?

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4. Victorian Clinical Genetics Services, Murdoch Childrens Research Institute , Melbourne

Background

Non-invasive prenatal testing (NIPT) identifies fetal aneuploidy by sequencing cell-free DNA in the maternal plasma. Pre-symptomatic maternal malignancies have been incidentally detected during NIPT based on abnormal genomic profiles. This low coverage sequencing approach could have potential for leimoyosarcoma screening in the non-pregnant population. Our objective was to investigate whether plasma DNA sequencing with a clinical whole genome NIPT platform can detect early- and late-stage high-grade leimyosarcoma compared to their benign controls

Methods

This is a case control study of prospectively-collected biobank samples comprising preoperative plasma from 4 women with metastatic leiomyosarcoma and 20 benign controls. Plasma DNA from cases and controls were sequenced using a commercial NIPT platform and chromosome dosage measured.

Sequencing data were blindly analyzed with two methods: (1) Subchromosomal changes were called using an open source algorithm WISECONDOR (WIthin-SamplE COpy Number aberration DetectOR). Genomic gains or losses ≥ 20 Mb were prespecified as "screen positive" calls, and mapped to recurrent copy number variations reported in cancer genome atlas. (2) Selected whole chromosome gains or losses were reported using the routine NIPT pipeline for fetal aneuploidy.

Results

We detected 1/4 cancer cases using the subchromosomal analysis (specificity 86% (95% CI 0.66-0.97)) . All of the 20 benign controls did not have any subchromosomal gains ≥ 20 Mb. For the positive result in the leiomyosarcoma patient, the NIPT pipeline resulted in a gain in 1q, loss in 10p and 10q and loss of 13.

Conclusions

Low coverage plasma DNA sequencing used for prenatal testing detected 25% of all leimyosarcomas, with all benign controls screening negatives. Our findings demonstrate the potential of a high throughput sequencing platform to screen for leiomyosacoma in plasma based on characteristic multiple segmental chromosome gains and losses. The performance of this approach may be further improved by refining bioinformatics algorithms and targeting selected cancer copy number variations.

Keywords

Non-invasive prenatal testing leimyosarcaoma screening Circulating tumor DNA Low coverage sequencing Copy number variations Genomic profiling Liquid biopsy

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Skin Preparation for Surgical-Site Antisepsis in Gynaecological Laparoscopic Surgeries: Preliminary results of A Double Blinded Randomised Controlled Trial

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Background: Surgical site infections (SSI) are defined by The Centers for Disease Control and Prevention (CDC) as superficial or deep skin infections or an organ/space infection (1) and are one of the most common serious complications of surgery and anaesthesia (2). They are a leading cause of re-admissions, need for antibiotic treatment and general discomfort to the patient and they substantially increase the cost of care. Up to date, no prospective studies have assessed rates of SSI after gynaecological laparoscopies nor the influence of different solutions used to clean the skin on those rates.

Objective: To prospectively assess and compare the rate of SSI in gynaecological laparoscopies amongst three methods of skin preparation.

Methods: Included were patients undergoing an elective operative gynaecological laparoscopy aged 18 or above. Patients were randomized to three groups of skin preparation: (1) Abdominal preparation with Alcohol-based Chlorexidine solution and vaginal/vulvar preparation with Aqueous-based Chlorexidine solution; (2) Abdominal and vaginal/vulvar preparation with Aqueous-based Poviodine-Iodine solution; (3) Abdominal preparation with Alcohol-based Poviodine-Iodine solution and vaginal/vulvar preparation with Aqueous-based Poviodine-Iodine solution. To prevent confounding a standardised protocol of antibiotic treatment was applied. Patients were followed up by a doctor 1 and 4 weeks after surgery and evidence of infection according to CDC criteria was documented. The patient's General Practitioners were asked to fill and send follow up forms in case an infection was diagnosed between the two follow-ups. The patient and the doctor performing the follow up were blinded to the method of skin preparation. Recruitment is ongoing and hence at this point we report overall infection rate and infection rate per coded groups without breaching blindness.

Results: Until now, 173 patients were recruited to the trial. Out of them, 83.3% had attended both follow up visits. Average age of participants was 36.8 years and average Body Mass Index was 27.3 kg/M^2. The most common procedure was laparoscopy for treatment of endometriosis. The overall rate of SSI was 19%. 12.7% of patients were diagnosed with a superficial skin infection and 8.1% were diagnosed with organ/space infections. No deep skin infections were diagnosed. There was no significant difference between the groups in the rates of infections.

Conclusions: SSI after gynaecological laparoscopies appears to be a more common event than might be expected. Careful examination of port-sites is advised after laparoscopic surgery. To date, type of skin preparation solution has not been shown to affect rates of SSI.

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Pelvic Organ Function after Laparoscopic Surgery for Deep Infiltrating Endometriosis: Interim Results of a Prospective Study

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Background: Prevalence of Deep infiltrating endometriosis (DIE) is estimated to be as high as 5% of the population (1). There is scarce and contradicting data in the literature regarding long term results of surgery for DIE. As surgeries for treatment of DIE may be associated with high incidence of surgical morbidity (2), treatment of DIE possess a therapeutic dilemma for the gynaecological surgeon.

Objective: To prospectively evaluate long term pain relief and bladder, bowel and sexual function after surgery for DIE.

Methods: Patients aged 18-50 who attended the pelvic pain focused gynaecology clinic at the Royal Women's Hospital, Victoria and who were suspected to have DIE and booked for surgery were recruited to the trial. All patients completed five pre-operative validated questionnaires: (1) Visual Analogue Scale (VAS) pain questionnaire; (2) ICIQ-FLUTS (bladder symptoms questionnaire); (3) ICIQ-B (bowel symptoms questionnaire); (4) Female Sexual Function Index questionnaire and (5) EQ-5D-5L Health (Quality of Life (QOL)) Questionnaire. All patients underwent excisional laparoscopic surgery after

which an operation report including a detailed description of surgical findings and rAFS and EFI scores was filled. Patients with surgery-proven DIE are followed-up with the same questionnaires 6 weeks, 6 months and 12 months post-surgery.

Results: To date, 64 patients with surgery-proven DIE have completed the 6-weeks follow up and 28 have completed the 6-months follow up. Pelvic, period and abdominal pain VAS scores have significantly improved at 6 weeks and 6 months as compared to before surgery. At 6 weeks of follow-up, incontinence score improved from 2.8 to 1.7 (p=0.005). There was also a 1.1-points average reduction in the amount this bothered the patients. This was not statistically significant at 6-months. Bowel-related QOL scores had improved by 0.9 points at 6-weeks (p=0.04) and by 2.65 points at 6-months (p= 0.003). Pain and control of bowel motions had improved at 6 weeks (p=0.001) but not at 6-months. Whereas all sexual function scores improved at 6 weeks (p<0.001-0.04), only the desire score was still significantly better at 6 months (p=0.04). Self-perception of health, pain/discomfort and anxiety/depression health scores had significantly improved at 6 weeks (p=0.02-0.03).

Conclusions: Pain symptoms improve 6 months after surgery for DIE. Whereas bladder, bowel and sexual function improve in the short term, the long term effect of surgery for DIE on pelvic organ function might be clearer after completion of the 12-months follow-up of all patients of this study.

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Sonographic Evidence of Adenomyosis in Patients Undergoing Surgery for Investigation of Pelvic Pain

Uri P Dior, Debbie Nisbet, Jenny Fung, Martin Healey, Grant Foster, Sally Mortlock, Peter A W Rogers, Grant Montgomery, Sarah J Holdsworth-Carson, Jane E Girling

Background: Severe dysmenorrhoea affects up to 30% of reproductive-age women (1). One of the most common causes of secondary dysmenorrhoea is adenomyosis. Pelvic imaging can now be used to diagnose adenomyosis with a high level of certainty (2). Whereas the general association of endometriosis and adenomyosis is well established (3), the complex clinical and molecular characteristics of patients with pelvic pain and adenomyosis is yet to be well defined.

Objective: To examine the presence of sonographic evidence of adenomyosis in a cohort of patients being surgically explored for endometriosis and to assess if there is an association between adenomyosis and endometriosis severity. Using gene expression analysis, we also aimed to determine if gene expression in eutopic endometrium differed in patients with and without adenomyosis.

Methods: Reproductive-age women who underwent laparoscopic surgery for investigation of pelvic pain were recruited between May 2012 and May 2016. Endometrial tissue, detailed patient questionnaires, pathology and surgical notes were collected for each participant. Sonographic data from tertiary ultrasounds performed up to 12 months before surgery was subsequently added (researchers blinded to surgical and pathological findings). Patients were divided to two groups according to presence or absence of sonographic evidence of adenomyosis (SEOA). Total RNA from endometrial tissue (n=59) was extracted and Illumina Human HT-12 Beadchips were performed to examine gene expression.

Results: 588 patients were recruited to the study, 234 patients (40%) had a tertiary pelvic scan and were included in this study. Average age of women was 30.6 years. 35% of patients were found to have SEOA. Patients with SEOA were 5.4 years older (p=0.02) and suffered period pain 2.5 years longer than patients without SEOA (p<0.001). Dyspareunia was also more prevalent in patients with SEOA (88% vs 77%, p=0.05). There was no significant difference in rates of endometriosis between groups, however, patients with SEOA were more likely to have stage 4 endometriosis (39% vs 15.1%, p<0.001). Patients with SEOA were also more likely to have other markers of severe endometriosis such as endometriomas and deep infiltrating endometriosis (p<0.001). No significant difference was observed in endometrial gene expression between adenomyosis cases and controls after adjusting for menstrual cycle phases.

Conclusion: Sonographic signs of adenomyosis are associated with severe dysmenorrhea and dyspareunia and can be used as a clinical marker to predict presence of severe endometriosis. Further research is needed to characterize uterine adenomyosis and to explore molecular pathways involved in its pathogenesis.

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Use of a multimedia module to aid junior doctors' knowledge to consent patients for Total Laparoscopic Hysterectomy: A randomised controlled trial.

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Abstract

STUDY OBJECTIVE

To determine whether the addition of a multimedia module outlining total laparoscopic hysterectomy to the standard consent process, improves junior doctor's knowledge in consenting patients to TLH.

DESIGN

Randomised Controlled Trial

SETTING

Three public hospitals- metropolitan tertiary women's hospital in Melbourne, Victoria; a rural general hospital in outer Victoria; a outer-metropolitan general hospital in Perth, Western Australia.

PARTICIPANTS

Thirty-one gynaecology residents and registrars, who work in gynaecology clinics and operating theatres in public hospitals in Australia.

INTERVENTION

Following the standard informed consent process, participants were randomised to watch the multimedia module (intervention group, n=15) or not (control group, n=16). All participants completed a knowledge questionnaire. The numeric scores between the groups were compared.

MESUREMENTS AND MAIN RESULTS

Participants' age, level of accredited RANZCOG training and months of O&G experience were recorded. The multimedia module group demonstrated superior knowledge scores. Mean score in the MM group was 17.467 and in the control group was 13.875 (maximum score 18). Mean difference -3.592 (95% CI -4.609 - -2.574) (p =<0.001)

Of those participants who watched the multimedia module, 93% (14 / 15) agree or strongly agree that the MM module is useful in consenting patients for TLH.

93% of the MM participants agree or strongly agree that they would like to show patients a MM module when consenting for TLH.

CONCLUSION

Use of a multimedia module in the informed consent process improves junior doctors' knowledge in consenting patients for total laparoscopic hysterectomy.

Levator morphometry in women with pelvic pain

Erin M Nesbitt-Hawes, Hans Peter Dietz, Jason A Abbott

The objective of this study was to describe the morphometry of the pelvic floor for a large population of women with pelvic pain compared to those without pain.

A prospective study was performed between January 2013-November 2015, recruiting women attending a general gynaecology clinic. Translabial four-dimensional ultrasound (4DUS) was performed on all women after collection of demographic data. Dynamic volumes of pelvic floor muscle contraction and Valsalva were recorded and analysed at a later date by an assessor blinded to demographic details.

Seven-hundred and forty seven women had translabial 4DUS over the course of the study, 469 (63%) with pelvic pain and 278 (37%) with no pelvic pain. Women with pelvic pain were found to have significantly smaller hiatal areas and left-right diameters on Valsalva compared with women without pain (p<0.01).

Women with pelvic pain have features of pelvic floor muscle hypertonicity in the Valsalva phase of dynamic 4DUS of the pelvic floor. Generally though, 4DUS has not been shown to be helpful as a new diagnostic modality for women with pelvic pain.

Re-intervention after hysteroscopic morcellation

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Objective: To assess the long-term efficacy and safety of hysteroscopic morcellation of polyps and submucosal leiomyomas in women with abnormal uterine bleeding (AUB).

Material and methods: We conducted a prospective cohort study including all women with AUB who underwent a hysteroscopic resection by mechanic morcellation of a benign polyp or submucosal leiomyoma confirmed at histopathology. Need for further surgery, patient satisfaction, symptom resolution, and post-operative complications were documented by direct patient contact after a minimum of six months of follow-up.

Results: A total of 122 women were included in the study with a mean length of follow-up of 31±13 months. Pathologies removed were submucosal leiomyomas 63/122 (52%), polyps 48/122 (39%) or both 10/122 (8%) with a mean total size of pathology at the time of index surgery of 33 mm. A total of 28/122 (23%) women required a subsequent surgery with, the estimated 3-year cumulative incidence being 11±3% for hysterectomy and 26±5% for any procedure (operative hysteroscopy, abdominal myomectomy or hysterectomy). Satisfaction rate of participants was 89%. In multivariate Cox proportional analyses, only a total size of pathology of 50 millimetres or more was found to be significantly associated with the risk of further requiring a hysterectomy (hazard ratio=3.5, p=.02) and any procedure (hazard ratio=2.8, p=.01).

Conclusion: Hysteroscopic morcellation of polyps and submucosal leiomyomas is an effective method to manage women with AUB, although women with larger pathology have an increased risk of requiring subsequent surgical procedures.

Incidence of adverse events in gynaecological hospital admissions: A systematic review

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Background

An adverse event (AE) is an unintended injury that results in temporary or permanent disability, death or prolonged hospital stay, and is caused by healthcare management rather than by the patient's underlying disease process. Overall, the incidence of AEs among patients admitted to hospital has been reported to be between 2.9% and 16.6%. It has been also reported that surgery-related AEs were the biggest contributor and operating theatres are the most likely location for AEs to occur.

Aims

The aim of our study was to investigate the incidence, preventability and mortality of AEs in gynaecological hospital admissions.

Materials and Methods

A systematic search of the MEDLINE, Embrace, and CINAHL medical databases was performed. Search terms included those corresponding to AEs, patient safety and medical errors combined with terms describing gynaecology or hospital setting. Clinical studies published in peer-reviewed journals in the English language were identified. A manual cross-reference search of the eligible papers was performed to identify additional relevant articles.

Results

The initial database searching identified 2,217 records. A total of 237 duplicates and 1,931 records were removed after screening the titles and abstracts. Of the remaining 49 records, 47 were excluded after reviewing the full-text articles and applying the inclusion and exclusion criteria. In addition, hand-searching the reference lists of potentially relevant articles identified 1 record. Therefore 3 articles in total were included in the study.[1-3]

These three studies were conducted in three different countries and were published between 1995 and 2009. Two were multi-centre retrospective studies and one was a single-centre prospective study. The number of gynaecological admissions in each study was between 135 and 1,866. The incidence of AEs ranged from 4.7% to 19.7% and preventability

was stated to range from 50.0% to 52.0%. The proportion of AEs associated with death was reported in two studies and ranged from 0% to 17.7%.

Conclusions

Evidence on AEs in gynaecological hospital admissions is limited and heterogeneous. It is apparent that AEs cause significant morbidities and mortalities in gynaecology and approximately half of these events are estimated to be preventable.

1. Zegers M, de Bruijne MC, Wagner C et al. Adverse events and potentially preventable deaths in Dutch hospitals: results of a retrospective patient record review study. Qual Saf Health Care 2009; 18: 297-302.
2. Wilson RM, Runciman WB, Gibberd RW et al. The Quality in Australian Health Care Study. Med J Aust 1995; 163: 458-471.
3. Matsaseng T and Moodley J. Adverse events in gynecology at King Edward VIII Hospital, Durban, South Africa. J Obstet Gynaecol 2005; 25: 676-680.

Surgery at home: Can portable laparoscopic simulators improve the skills of gynaecology trainees?

Erin Wilson[1], Sarah Janssens[2], Luke McLindon[2], David G Hewett[3], Brian Jolly[4], Michael Beckmann[2]

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4. School of Medicine and Public Health, University of Newcastle, Newcastle, NSW

Background: Simulation can provide an adjunctive means of surgical training for Gynaecology trainees, yet there are barriers to this type of training such as time and equipment access.

Aim: To evaluate the impact of a simulation-training program utilising take-home box trainers on the laparoscopic skills of trainees.

Methods: A cohort study was undertaken at a tertiary hospital in Brisbane. Participants (N=17 in 2015, N=16 in 2016) were supplied with a box trainer, associated equipment and instructions on self-directed training. Half of the participants were randomly allocated a mentor. Assessment of laparoscopic skills was performed in box trainer and virtual reality simulator tasks pre- and post-training. Participants were supplied with logbooks and practice time was reviewed, including analysis by mentor allocation.

Results: In 2015, trainees demonstrated an improvement in the median time to complete a virtual reality laparoscopic tubal ligation task (baseline 124 seconds versus post-training 91 seconds, P=0.041). There was no difference in the number of tubal ligation bleeding incidents, or in the time taken to complete the box trainer task. In 2016, trainees demonstrated improvement in tubal ligation time (251 versus 71 seconds, P=0.021) and virtual reality bilateral oophorectomy time (891 seconds versus 504, P=0.025). When combining all data from the 2015 and 2016 groups, significant improvements were observed in both the time and number of bleeding incidents in the tubal ligation task. There was no significant difference in other outcome measures or when groups were compared by mentor allocation. Some trainees failed to complete logbooks or all assessment tasks.

Conclusion: In two years of a take-home box trainer simulation-training program, improvements were observed in laparoscopic skills. A lack of logbook completion and compliance with assessment tasks may indicate suboptimal program engagement; a notable occurrence given the program was designed to overcome barriers to training. Further research may help to refine the essential components of curriculum design and enhance trainee engagement. This type of program may improve trainee access to simulation training.

To become a better surgeon: Why Trainees enter Advanced Training Programs in Endoscopic Surgery

Anusch Yazdani[1], Julie Hepworth, David Lim, Thea Bowler, Jason Abbott, Bruce Dunphy

1. Eve Health, Spring Hill, QLD, Australia

The face of obstetrics and gynaecology is changing, driven by the reduction in inpatient length of stay, the increase in the total number of general specialists, an explosion of knowledge from advances in science and information technology, increasing patient education and an increased emphasis on life-work balance with a concomitant reduction in working hours. Specifically, the last 20 years have seen the rise of subspecialization to the point where almost one in three specialists pursue further subspecialist training according to the Workforce Intentions Survey (RANZCOG, 2013). Unfortunately, there is limited published information on the factors that determine why specialists choose to subspecialise.

The purpose of this study was to assess why trainees choose to enter an advanced training program in endoscopic surgery.

Methodology

This study employed a mixed methods design. Between 2014 and 2017, all candidates for, and trainees in the AGES Accredited Training Program were invited to participate. Candidates attending interviews from 2014 completed questionnaires at the interviews. The answers to these questions informed the exploratory interviews of 2016 and 2017. Study subjects were selected by exhaustive criterion sampling.

Data analysis

Interview data were organised into categories and analysed by NVivo 10 and analytic induction in a staged, independent analysis. Units, themes and sub-themes were finalised and the data processed in a framework approach to data analysis. The validity of the qualitative data analysis and interpretation was established using traditional approaches in qualitative research including data triangulation.

Quantitative continuous and categorical data were subject to parametric, nonparametric and regression analysis where appropriate using SPSS Professional.

Ethics approval for this study was granted from Queensland University of Technology Human Research Ethics Committee (1500000108).

Results

In 2014 and 2015, there were 36 candidates for the AGES accredited training program and 32 completed the questionnaire. In 2015, there were 22 candidates and 6 participated in interviews. In 2016, 18 trainees were invited, 6 participated in the interviews. In 2017, all graduates of the AGES Training Program (13) were invited to participate in interviews, of which 6 agreed and 4 attended the interviews.

The main themes identified in the study were learning, recognition and the training program, each with a fluid set of subthemes.

Conclusion

Not surprisingly, the main reasons for entering the training program were increased opportunity to learn and gain skills. However, professional recognition, peer networks and to access to a formalised training program were equally important themes.

SESSION 4A: FAST AND FURIOUS I: THE HYSTERSCOPE EVOLVES / 1600-1720

Can We Find Our Niche?

Ben Mol

Abstract not yet received.

Polyps: Blind no More

Simon Edmonds

The hysteroscopy and polypectomy is unique in surgery, as the only procedure that removes a pathology, without directly visualising the tissue at the time.

"Blind fishing".

With all the surgical advances in equipment, why are we not surgically resecting all lesions under direct vision? Or can we really just leave polyps behind?

Ablation and the New Burn

Lenore Ellett

Abnormal uterine bleeding (AUB) is a common condition affecting between 10- 30% of women during the reproductive years. AUB impairs health and quality of life. [1].Heavy menstrual bleeding (HMB) is the most common pattern of AUB and is associated with high rates of operative intervention and gross financial burden. Medical treatment with oral contraceptive pills or levonorgestrel intrauterine devices is generally the first line of therapy.

Failure of medical treatment warrants further intervention, which was limited to hysterectomy until the late 1980s when endometrial ablation (EA) evolved as an alternative. [2]

This presentation will look at the different second generation endometrial ablation devices available in Australia. Success rates, re intervention rates and patient outcomes will be discussed. In order to achieve high patient satisfaction appropriate pre operative counselling is necessary in order that the woman clearly understands what outcomes she can expect. Pregnancy implications will be touched on. A patient case study will be presented by way of illustrating some of the issues surrounding endometrial ablation.

Submucous Fibroids: Should We Treat Them All?

Jason Abbott

Abstract not yet received.

Complications of Hysteroscopy: How much of a problem is it anyway?

Emma Readman

This talk will review the statistics about the complications of hysteroscopic surgery, discuss the complications and then outline the measures that have been shown to reduce complications, concentrating on the practical. Things that will be reviewed are antibiotics, misoprostol, vasopressin, US guidance, fluid management and adhesion prevention.

Palm Coein: Does it Solve my HMB?

Rebecca Szabo

Abstract not yet received.

What's Hot in Surgical Devices?

Ted Lee

Repurposing Surgical Devices: Excision of Visceral Endometriosis with "Vessel Sealer" and Visceral Repair with Barbed Suture

The best chef can repurpose leftover food in the fridge and make it tastes great. It is important for the chef to have deep understanding of the ingredients and develop masterful techniques in order to improvise. In order to repurpose a preexisting surgical device, a surgeon similarly needs to know the strength and weakness of the device as well as the principles behind the task he or she needs to accomplish. This presentation will demonstrate the innovative use of Enseal for the excision of bowel and bladder endometriosis and the unique use of barbed suture for the repair of the bowel and bladder defect.

SESSION 4B: FAST AND FURIOUS II: UPDATES IN GYNAECOLOGY / 1600-1720

HRT/MHT: The Hormones for NOW

Elizabeth Farrell

Menopause Hormone Therapy (MHT) is the treatment for the management of moderate to severe menopause symptoms and is low risk in women between 50-60 years or within 10 years of the final menstrual period

Transdermal oestradiol and oral micronized progesterone is considered to have lower risks of all the available therapies.

Treatment of vasomotor symptoms in women with a history of breast cancer can be challenging. Antidepressants such as venlafaxine, paroxetine and escitalopram have been used as well as gabapentin and clonidine. Recent studies suggest that hypnotherapy and cognitive behavioural therapy have also been successful. Vaginal oestrogens for urogenital atrophy are used but in those women on aromatase inhibitors it is controversial.

The newest product available is a TSEC therapy, a combination of conjugated oestrogens and a SERM, bazedoxifene.

Why women have hot flushes is still a puzzle but further neurochemistry findings suggest a new research pathway for treatment.

Where Has my Pap Smear Gone?

Annabelle Farnsworth

On the 1st December, 2017, Australia introduced a Renewed Cervical Screening Program. The conventional Pap smear was replaced as the screening test with molecular testing for Human Papilloma Virus (HPV). The change was largely mandated by the development of new technologies and the highly successful national vaccination program for HPV. Because of the increased sensitivity of HPV testing, screening is to commence at age 25 and take place at 5 yearly intervals. Because of this increased sensitivity, triaging of positive results by Cytology and Colposcopy is necessary.

As part of the new program, testing for symptomatic patients has also been included. Any woman with certain symptoms or signs at any age can have a test for HPV and in some circumstances, a co-test for HPV and cytology. Managing these symptomatic women can be complex and management algorithms present in the new treatment guidelines are at times confusing.

These changes may affect all Gynaecologists with increased referrals for abnormal bleeding and the more complex management algorithms need to be understood.
Specific case presentations will be briefly presented to help, discuss and clarify some of these issues.

Hormones and Headaches: Can they Get Along?

Christina Sun-Edelstein

The diagnosis and management of menstrual migraine will be reviewed in this presentation. Updated evidence on the use of combined hormonal contraceptives in migraineurs will be presented, focusing on the relationship between COCPs, stroke and migraine. Nonhormonal treatment options for menstrual migraine will be discussed as well.

Clomid: Ovulation for Everyone

Kate McIlwaine

The idiom "it's an oldie but a goodie" is aptly applied to the use of clomiphene citrate in anovulatory subfertility. This is particularly so in women with polycystic ovary syndrome (PCOS) whereby its anti-oestrogen action is exploited to stimulate production of FSH from the anterior pituitary. Clomiphene citrate has been used as a first-line medical ovulation induction agent since 1967[1] and it's use remains as relevant today as ever. When "evolving towards excellence" one must be mindful of the various contributors towards the presenting problem in the patient and apply a multi-faceted treatment plan whilst taking care not to over-service the patient. This "fast and furious" presentation of clomiphene will focus on the essentials of its use in clinical practice, tips and tricks, pitfalls and when to move on to other treatments.

1. Costello M, Misso M, Wong J, Hart R at al. The treatment of infertility in polycystic ovary syndrome: a brief update. ANZJOG 2012; 52: 400 - 403.

Complex Atypical Hyperplasia: A Way Forward

Kym Reid

As the incidence of obesity rises, the number of women being diagnosed with endometrial cancer is also increasing. Similarly, the precancerous state, complex atypical hyperplasia, is also on the rise, and the number of younger patients being diagnosed with complex atypical hyperplasia is increasing.

Alongside this, is a population delaying child bearing to a later age, and as result, the management of complex hyperplasia with atypia must involve more than hysterectomy.

This presentation will involve discussion regarding the conservative management of complex atypical hyperplasia, and explanation of the term Endometrial Intraepithelial Neoplasia (EIN), pathologically felt to be the more appropriate nomenclature for the precursor to endometrial carcinoma.

Contraception: Things have Changed

Beverley Vollenhoven

Long Acting Reversible Contraception (LARC) comprises IUDs (Mirena and Copper), Implanon and Depo-Provera. IUDs and Implanon should now be the first line treatment for the majority of reproductive aged women. A smaller low dose laevonorgestel (LNG) containing IUD has been approved for use in Australia but will probably not be available here in the near future. Filshie clip laparoscopic sterilisation was more common before LARCs became readily available, but it appears that more couples are requesting this form of contraception once again. Essure sterilisation is currently the subject of a class action in the USA so its popularity has waned. The most recently approved Emergency contraception in Australia is Ella-One (ulipristal acetate) and is as effective for emergency contraception as 1.5mg LNG (Postinor) but can be used after 5 vs 3 days of unprotected intercourse. The copper IUD can also be used up to 5 days after unprotected intercourse and the benefit of its use is that it can be used for ongoing contraception.

FRIDAY MARCH 9

SESSION 5: LIVE SURGERY / 0800-1045

SESSION 6A: FREE COMMUNICATIONS / 1115-1245

Magnetic resonance-guided focused ultrasound surgery (MRgFUS): A minimally invasive approach to managing symptomatic leiomyomas and its potential role in pre-operative optimisation of the surgical candidate.

Annabelle Brennan[1], Shamitha Kathurusinghe[1], Kiri Chan[1], Kelly Van Den Haspel[1], Andrew Dobrotwir[2], Catarina Ang[1]

1. Gynaecology Unit 1, Royal Women's Hospital, Parkville, Melbourne, Victoria, Australia

2. Pauline Gandel Imaging Services, Royal Women's Hospital, Parkville, Melbourne, Victoria, Australia

Magnetic resonance-guided focused ultrasound surgery (MRgFUS) is gaining increasing attention as a minimally invasive treatment for symptomatic leiomyomas. Systematic reviews demonstrate significant symptom improvement following MRgFUS treatment.[1][2] However, widespread use is hindered by insufficient evidence regarding fertility outcomes and minimal access to treatment services; in many centres, its use is largely limited to clinical trials.

A retrospective clinical audit was undertaken of patients undergoing MRgFUS treatment for fibroid symptoms within a tertiary health service between 2009 and 2013 inclusive. One hundred and ninety four patients received MRgFUS treatment during this period. These patients were cross-referenced with an existing leiomyoma database of a gynaecology unit to identify the number of patients with persistent fibroid symptoms requiring subsequent surgical management. One hundred and ninety four control patients who underwent surgical management of fibroids were also randomly selected

from the leiomyoma database. Patient demographics were consistent between cohorts with an average age of 42 years for MRgFUS treatment and 43 years for surgical management.

Patients who had received MRgFUS treatment prior to their operation were then compared to the control cohort. This study assessed the potential role of MRgFUS in pre-operative optimisation for fibroid surgery by comparing length of surgical procedure, estimated intra-operative blood loss and length of hospital stay.

Consistent with international data, MRgFUS appeared to be an effective management for fibroid symptoms. Approximately 15% of patients required subsequent surgical treatment and 85% of these were required for persistent symptoms. The remaining 15% occurred for recurrent symptoms with the average time between MRgFUS treatment and symptom recurrence of 41.5 months.

Prima facie pre-operative MRgFUS does not appear to offer significant improvement in operative outcomes; both cohorts demonstrated similar procedure times, estimated intra-operative blood loss and length of hospital stay. However, the overall average time from MRgFUS to surgical management was almost two years. Moreover, on re-analysis, MRgFUS received within 12 months of surgery appeared to reduce overall operative time by approximately 15% and almost 30% when used within six months of surgery. These benefits were maintained across surgical procedures including hysterectomies and myomectomies.

This study discusses how these factors may interplay for the patient with symptomatic fibroids. Furthermore, the direction of future research will be outlined in order to be able to guide clinical decision-making for the gynaecologist seeking to provide up to date, safe and patient-centred care.

1. [1] Clark NA, Mumford SL, Segars JH. Reproductive impact of MRI-guided focused ultrasound surgery for fibroids: a systematic review of the evidence. Curr Opin Obstet Gynecol. 2014; 26: 151-161.
2. [2] Fennessy FM, Tempany CM. A Review of Magnetic Resonance Imaging Guided Focused Ultrasound Surgery of Uterine Fibroids. Top Magn Reson Imaging 2006; 17(3): 173-179.

Could the European Academy of Gynaecological Surgery's diploma of minimally invasive gynaecological surgery become a new model for standardised laparoscopic simulation training in Australia and New Zealand?

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1. Women's Health, Guy's and St Thomas' NHS Foundation Trust, London, Middlesex, United Kingdom

2. Whittington Health NHS Trust, London, United Kingdom

3. Life Expert Centre, Leuven, Belgium

Since the advent of laparoscopic gynaecology, and its widespread adoption over the last few decades, two opposing trends have become apparent: trainees' increasingly limited opportunities as primary operator at laparoscopy, and the steep learning curve to become a competent laparoscopic surgeon. These opposing trends combine to mean that trainees worldwide find it increasingly challenging to gain competence as laparoscopic surgeons during their basic training.

In addition, rising medico-legal concerns further strengthens the argument for mandatory pre-operative laparoscopic simulation training for all trainees: it is becoming increasingly difficult to defend a trainee who encounters a complication whilst attempting basic laparoscopic skills in a patient, that could have been learnt in a simulated setting.

Laparoscopic simulation training has been shown to help fill this gap, by providing trainees with the opportunity to develop both basic and advanced laparoscopic skills, alongside skills gained during actual laparoscopic operations. However, there remains a need for a standardised simulation training and certification program across Australia and New Zealand.

Over the last five years, the European Academy of Gynaecological Surgery (EAGS) has developed and implemented such a certification system, to support and standardise laparoscopic simulation training across Europe (and also beyond, eg. USA, South Africa, and China). Based on principles of sound surgical education, the EAGS program provides a standardised, internationally-recognised certification system, with high levels of construct validity. Over 900 certificates have been awarded thus far, and the system continues to gain momentum, with support from a growing number of national gynaecological surgery associations (eg. the British Society of Gynaecological Endoscopy, which plans to introduce this program at its annual conferences).

In this presentation, I will: outline the structure of the EAGS certification system; clarify the educational theories behind the program, including its construct validity; and suggest how the EAGS system could be adopted and implemented locally in Australia and New Zealand.

Perfusion MRI in Asherman syndrome

Rebecca Deans

Aim:
Magnetic resonance imaging (MRI) is increasingly being used as a diagnostic modality for Asherman syndrome (AS), and the appearance of the junctional zone shows promise as a marker for severity of intrauterine adhesions (IUA). This provides information beyond the visualisation of the endometrium afforded by hysteroscopy. Newer MRI technology includes dynamic studies using gadolinium-enhanced T1-weighted images. These have been used in endometrial and cervical cancer. There is a no information regarding the role of vascular perfusion MRI for AS and IUA. This study explores using MRI as a non-invasive modality to assess microvascular perfusion of the uterus in women with IUA.

Methods:
This is a proof of concept study. This study has 2 main objectives:

- To assess perfusion patterns in women with AS, using the total perfusion (TP), ratio of perfusion (RP), time to peak (TTP) and gradient of perfusion (GP) to assess vascular markers of disease.
- To compare uterine perfusion in women with differing stages of AS. Receiver operator curves (ROC) were used to analyse the value of perfusion of MRI as a test for severity of AS

Patients:
23 women diagnosed with AS. All had preoperative scans, and 5 women had post-operative scans. Six women had Grade IV AS, and 4 women had incomplete/inoperable disease.

Results:
There were no differences between the perfusion indicies performed; TP, RP, TTP and GP across Grade of disease. Using a ROC to assess GP of Grade IV vs other Grades; the area under the curve was 0.823 when the gradient was < 11 mL/sec. When assessing inoperable disease with TP, the area under the curve showed a value of 0.855, mean uterine perfusion studies in the pre-operative uterus were highly predictive of uterine cavity obliteration vs. lower grade disease.

Conclusion:
The uterine perfusion in women with Grade IV and inoperable IUA was significantly lower than those that had lower Grade AS. Vascularity of the uterus may hold the key to understanding the pathological process behind AS. Perfusion MRI may provide a prognostic tool to assess vascularisation, and aid in the management of women with IUA. Future applications of this technique may include development of imaging methods to predict success of surgery, given the relatively high rates of complication following hysteroscopic synechiolysis or indeed the impaired reproductive function of the uterus following surgery, despite objective visual normalisation of the endometrial cavity.

Medical management of Tubo ovarian abscess (TOA): Are we failing patients by avoiding surgery?

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1. Obstetrics and Gynaecology, Monash Health, Clayton, Vic, Aus

2. The Royal Women's Hospital, Parkville, Vic, Aus

3. Gynaecology unit 1, The Royal Women's Hospital, Parkville, Vic, Aus

Background:

The optimal management of TOA is unclear. Medical management can result in a prolonged clinical course and treatment failure is up to 30%[1]. However, there is insufficient data on optimal surgical treatment. The aim of this study was to compare medical treatment with surgical treatment to identify characteristics of treatment failure and understand the role and timing of surgery.

Methods:

A retrospective cohort study of all admissions to the Royal Women's Hospital between 2012-2016 of imaging confirmed tubo-ovarian abscess was performed. Clinical characteristics, treatment modality, outcomes and complications were reviewed.

Results:

Eighty-two clinical files were reviewed and 49 met the study criteria; 19 received medical treatment whilst 30 had surgical management during their treatment course. Sixteen patients underwent same admission surgery, and 14 had delayed surgery. The mean age was 37 years. The main presenting feature was abdominal pain (98%). All patients received intravenous antibiotics as first initial therapy.

In comparison to those who received medical treatment, surgical patients were more likely to be clinically unwell with temperature >38 (36.7% versus 15.8%), have a higher mean white cell count (14.7 $x10^9$/L versus 11.5$x10^9$/L) and higher mean C-reactive protein (168.7mg/L versus 97.4mg/L). The main indication for immediate surgery was clinical deterioration, with 25% diagnosed with septic shock or abscess rupture. All patients in the delayed treatment group were discharged on oral antibiotics after first admission. However, there was over 50% representation rate and 28.6% required emergency surgery.

Of patients who had surgery, 86.7% underwent laparoscopy and the remainder had laparotomy. Forty-three percent received drainage and/or washout only and 6.7% had a diagnostic laparoscopy only due to complex surgical findings. There was a 3.3% visceral injury rate. All surgically treated patients were symptom free at discharge.

In the medical group, all patients were discharged home on oral antibiotics. There was a 21% representation rate. Of the 37% who attended follow up, 86% had persistent collections on ultrasound at discharge.

Conclusion: This study suggests that surgery focusing on minimising infective load is associated with more complete resolution of symptoms and low complication rates. Consideration should be given to early surgery as delay may be associated with higher representation rates, emergency surgery and persistent pain. Medical treatment alone is associated with persisting pelvic collection. Data collection is ongoing to continue to appraise patient outcomes.

1. Lareau SM, Beigi RH. Pelvic Inflammatory disease and tubo-ovarian abscess. Infect Dis CLin North Am. 2008;22(4)693-708

Subsequent Laparoscopy in patients receiving adjuvant hormonal therapy after Laparoscopic Excisional Surgery for Endometriosis

Gemma Ferguson[1], Christine Foster[1], Catherine Malone[1], Keith Johnston[1], David Morgan[1], Geoff McCracken[2]

1. Antrim Area Hospital, Northern Ireland, Belfast, -, United Kingdom

2. Obstetrics and Gynaecology, Craigavon Area Hopsital, Portadown, Northern Ireland

Objective: To review demographics and outcome in terms of repeat laparoscopy/ies in two cohorts. Those who received adjuvant hormonal therapy versus those who did not receive hormonal therapy, after laparoscopic excisional surgery for endometriosis.

Design and Methods: Retrospective data collection of 135 women undergoing laparoscopic surgery for endometriosis over a seven year period, by three advanced benign laparoscopic surgeons. Identification of those who had laparoscopic excision of endometriosis, with a positive histopathology finding of endometriosis, through review of patient chart, electronic and histopathology record.

Results: Of 135 women undergoing laparoscopic surgery for endometriosis, 78 women had excision of endometriosis, with positive histology findings. 46% (36/78) received adjuvant hormonal therapy after primary excisional laparoscopy, 54% (42/78) did not. The most common adjuvant treatments were Mirena (61%), COCP (17%), GNRH analogues (14%), Depova (5%) and POP (3%) respectively. Average age was 32 years (range 17-47) in the adjuvant group, and 37 years (range 16-45) in the non-adjuvant group. Average parity and BMI were similar in both groups.

Patients in the adjuvant group had more associated psychomotor comorbidities such as IBS, depression and fibromyalgia compared with those not receiving adjuvant therapy (47% vs 24%).

At laparoscopy surgeons classified disease severity as mild in 44% (n=16), moderate in 39% (n=14) and severe in 17% (n=6) in the adjuvant group, versus mild in 50% (n=21), moderate in 26% (n=11) and severe in 24% (n=10) in the non-adjuvant group.

In the adjuvant group 78% (n=28) of patients had a recurrence of their symptoms following surgery versus 40% (n=17) of patients in the non-adjuvant group.

53% (n=19) required at least one further laparoscopy in the adjuvant group versus 26% (n=11) in the non-adjuvant group. The average interval between initial surgery and subsequent surgery;27 months (range 4-74) in the adjuvant group versus 30 months (range 11-48) in the non-adjuvant group.

Conclusion: Overall those patients that had adjuvant therapy did not seem to fare as well. The adjuvant group were generally younger and had a higher incidence of pre-existing comorbidities. They had a higher frequency of moderate disease reported at primary laparoscopy, with increased patients reporting recurrence of their symptoms necessitating further laparoscopy.

New Diagnosis of Endometriosis Less Likely in Women over Age Forty Presenting with Pelvic Pain

Shamen Gunawardena[1], Uri Dior[1], Rachel Collings[1], Claudia Cheng[1], Martin Healey[1]

1. Royal Women's Hospital, Parkville, VIC, Australia

Background:

The diagnosis of endometriosis remains challenging given its variable clinical presentation, unclear biology and necessity for surgical or histopathological diagnosis through laparoscopy. The prevalence of endometriosis is estimated to be 6–10% among women in their reproductive years (1) and this can increase up to 70-90% in patients who present with chronic pelvic pain (2). However, there is scarce data on the incidence of endometriosis in women above the age of 40 who present with pelvic pain.

Objective:

To investigate the incidence of endometriosis in women above the age of 40 who present with pelvic pain and who were not previously diagnosed with endometriosis.

Method:

A retrospective study of women who presented to a pelvic pain focused gynaecology clinic at the Royal Women's Hospital, Parkville, Victoria between 2013 and 2016. Included were premenopausal women above the age of 18 who presented with pelvic pain and were booked for a laparoscopy for investigation of this pain. Patients who had a previous laparoscopy and those who had sonographic evidence of endometriosis were excluded. Patients who met the inclusion criteria were divided into groups according to age (<40 and > 40 years). Patients were included in a 1:1 ratio (above and below the age of 40). Demographic, clinical, surgical and histopathology data was collected from medical records. Rates of a new diagnosis of endometriosis, based on surgical findings and histopathology, were compared between the two groups.

Results:

During the study time frame, 722 women have presented to the clinic with pelvic pain and were booked for laparoscopy. Of these, 120 (16.6%) met the inclusion criteria and were included in the study. Endometriosis was diagnosed in 33.3% of patients aged 40 and above and in 78.3% of patients below the age of 40 ($p<0.001$). Deep infiltrating endometriosis was diagnosed in none of the women at or above age 40 and 10% of women below the age of 40 ($p=0.01$).

Conclusion:

The likelihood of a new diagnosis of endometriosis above the age of 40 is lower than in younger women. Therefore careful counselling and consideration of the risks of surgery is recommended prior to performing a laparoscopy for investigation of pelvic pain in this age group.

1. Dunselman GA et al (2014) ESHRE guideline: Management of women with endometriosis. Hum Reprod Mar; 29(3):400-12.
2. Gambone J, Mittman B, Munro M, Scialli A, Winkel C (2002) Chronic pelvic pain and endometriosis: proceedings of an expertpanel consensus process. Fertil Steril 78:961–972

An audit of women with acquired uterine arteriovenous malformations at the Royal Women's Hospital (2010-2016)

Monica N Koenig[1], Ricardo Palma-Dias[1], Karen Reidy[1], Caterina Ang[1], Rebecca A Szabo[1]

1. The Royal Women's Hospital, Parkville, VIC, Australia

Uterine arteriovenous malformations (AVMs) are a rare cause of abnormal uterine bleeding (1). They are vascular anomalies involving pathological connections between and arteries and veins which can form secondary to surgery, trauma, pathology and/or pregnancy in a previously healthy uterus (2). There are currently no consensus diagnostic criteria or treatment guidelines for acquired uterine AVMs (3), and little is known about them in an Australian context. The objective

of this retrospective audit was to describe the presentation, diagnosis, management and outcomes of women with acquired uterine AVMs at The Royal Women's Hospital, Parkville.

All cases of acquired uterine AVM diagnosed by ultrasound and/or magnetic resonance imaging (MRI) from 2010 – 2016 were included. Imaging reports were searched for women who met inclusion criteria, and 18 cases were identified. Data were collected from electronic databases and paper medical records. Central tendency was expressed as median ± range. Bivariate analyses were performed using an Independent Samples Mann-Whitney U or two-tailed Fisher's Exact Test with a significance level of $p<0.05$.

The rate of acquired uterine AVM diagnosis was found to have increased from 2011 to 2015, and decreased from 2015 to 2016. Included women had a median age of 29.2 years, gravidity of two and parity of one. The most common event prior to acquired uterine AVM development was surgical termination of pregnancy (n=6). Two women were diagnosed after caesarean section. All women presented with per vaginal bleeding and all were initially diagnosed with ultrasound. Eight women underwent MRI. There was no significant relationship between the peak systolic velocity of acquired uterine AVMs and subsequent management, serum haemoglobin, or clinical outcome. Women were managed expectantly (n=7) with methotrexate (n=1), or with uterine artery embolisation (n=9). Eleven women underwent angiography, and five were diagnosed with angiographic entities other than acquired uterine AVMs. Use of MRI was associated with accurate acquired uterine AVMs diagnosis at angiography, however this was not statistically significant (p=0.242). No variable was found to differentiate angiographic confirmed acquired uterine AVMs from other angiographic diagnoses.

These data indicate that rate of acquired uterine AVMs diagnosis at RWH is not continually increasing, and is not related to caesarean section rates. In our cohort, peak systolic velocity did not predict acquired uterine AVMs severity. These data suggest that while ultrasound is the mainstay of initial acquired uterine AVMs diagnosis and MRI is a useful adjunct imaging tool, angiography should remain the gold-standard of diagnosis.

1. Yazawa H, Soeda S, Hiraiwa T, Takaiwa M, Hasegawa Endo S, Kojima M, et al. Prospective Evaluation of the Incidence of Uterine Vascular Malformations Developing After Abortion or Delivery. Journal of minimally invasive gynecology. 2013;20(3):360-7.
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Management and Outcomes of Atypical Endometrial Hyperplasia: Should we perform bilateral oophorectomy at hysterectomy? And what are the outcomes of progesterone use?

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Study Objective: To report on the management and outcomes of atypical endometrial hyperplasia (AEH), including the risk of concurrent endometrial cancer to determine if bilateral oophorectomy should be performed at time of hysterectomy. Also to report on the use of progesterone therapy for AEH to make recommendations for duration of therapy and surveillance.

Design: Retrospective audit/case series

Setting: The Mercy Hospital for Women, a tertiary level women's hospital in Melbourne, Australia

Patients: All women diagnosed with atypical endometrial hyperplasia on endometrial sample from 1st January 2005 – 31st December 2014 inclusive

Interventions: We analysed characteristics and risk factors in those who ever versus never went on to receive a diagnosis of endometrial cancer.

Measurements and Main Results: 15% (18/117) received a diagnosis of endometrial cancer during the study period. 12% (14/117) patients had a concurrent endometrial cancer diagnosed. Those at higher risk of malignancy were those being investigated for postmenopausal bleeding and those for whom the initial pathology report of endometrial biopsy was suspicious for but not diagnostic of malignancy. Of the 69 hysterectomies with removal of ovaries 15/69 (21.7%) had cancer diagnosed in the hysterectomy specimen and 54/69 (78.3%) did not. 28/47 (59.6%) of patients who ever received progesterone therapy had regression of disease to a normal endometrial sample, median time to regression was 151 days (5 months). Of those who normalised on progesterone 2/28 (7.1%) recurred as hyperplasia and 1/28 (3.6%) progressed to malignancy.

Conclusion: Ovarian conservation at hysterectomy for AEH should be practiced in the absence of significant individualised risks. When progesterone therapy is used for AEH, we recommend 6 months duration of treatment followed by resampling. In cases where progesterone has been ceased following normalisation of the endometrium, resampling is recommended.

From Cave Paintings to Robotics: Establishment of Endoscopic Surgery in Australia

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The promise of endoscopic surgery rests in the delivery of the benefits of traditional open surgery, with improved visualisation, minimisation of recovery, cost reduction and faster return to activities of daily living. Gynaecologists, traditionally vaginal surgeons, have embraced minimal access and endoscopic treatments as the preferred modality in a number of conditions, such as the management of ectopic pregnancy. This paper explores the emergence of endoscopic surgery and the role of gynaecologists in the development and the dissemination of this modality in Australia.

Methodology

A systematic narrative review of the literature utilizing historical research methods to chronicle the evolution of endoscopic surgery was conducted. Relevant primary and secondary reference sources, including electronic, paper-based and human sources about the emergence of endoscopic surgery were identified through a systematic search of electronic databases of published literature, historical archival material and snowballing techniques.

Historic discrepancies and bias were subject to historiographic critique where identified, including the collation of 'key historical moments' in the emergence of the Australian status quo.

Results

The origins of endoscopic surgery can be traced as far back as 37000 years before present. The challenges of prohibition, diagnosis and therapy, as well as the technical challenges of, access, lighting and imaging, have been successfully managed until the first procedure was performed in Australia in 1961. Key literary discrepancies exemplify the fluidity of history in the emergence of endoscopic surgery. The evolution of endoscopy in Australia illustrates the emergence of a subspecilasised knowledge and skill sets with subsequent integration into general training. Parallels can be drawn between the introduction of robotic surgery and the emergence of laparoscopic surgery in Australia.

SESSION 6B: FREE COMMUNICATIONS / 1115-1245

AGES Global Gynaecology Scholarship: Gynecologic issues in Mongolia

Aina Kuk, Bolorjargal Erdenebileg

Western-style medicine in Mongolia was introduced in 1922. Today the health service structure is well adapted to the needs of the country.

The differences in geographical and settlement conditions create significant disparities in health needs between rural and urban populations.

In this report we give an overview of the development and current status of medical service, disease patterns, and medical educational systems, including gynecological surgical specialty training.

Feasibility of incorporating the Standard Surgical Form (SSF) into clinical practice and implications for advancing endometriosis research - a prospective observational study.

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1. Centre for Advanced Reproductive Endosurgery, Sydney, NSW, Australia

Background: Endometriosis is an enigmatic disease, the underlying aetio-pathophysiology of which remains unclear. Endometriosis Phenome and Biobanking Harmonisation Project (EPHect) provides new tools to facilitate comprehensive data analysis to advance endometriosis research.

Aim: To assess the feasibility of implementing the EPHect surgical phenotype data Standard Surgical Form (SSF) into a busy clinical practice.

Design: A prospective observational study

Materials: SSF was completed for 225 women with known or suspected endometriosis.

Results: Mean time for completion of the SSF was 8 minutes (range 2-17 minutes). The main factors which determined the time taken were the severity and distribution of the disease. Intraoperative photos may assist documentation and reduce potential recall errors. Certain aspects of the SSF may need modification to reduce duplication.

Conclusion: This study demonstrates that introducing the SSF is feasible. Widespread adoption of this EPHect tool should be encouraged to enhance global and meaningful endometriosis research.

Effect of surgical treatment of endometriosis on bladder pain syndrome: a prospective cohort study

Rachel Collings, Claudia Cheng, Martin Healey, Romany Erwin

Background

Chronic pelvic pain is a frustrating condition for many women with endometriosis considered the main cause with a prevalence of 70-90%. A number of recent studies have found that bladder pain syndrome is also an important differential diagnosis to consider and have also reported the high prevalence of having concomitant bladder pain syndrome and endometriosis. (1,2) Limited data exists however on the symptom outcomes of women who undergo laparoscopic treatment of endometriosis particularly relating to bladder symptoms.

Objective

To investigate the effect of surgical treatment of endometriosis on bladder pain syndrome and chronic pelvic pain symptoms at 12months post laparoscopy. The secondary outcomes reviewed include:

- Relationship between endometriosis over the uterovesical pouch and bladder pain syndrome;
- Rates of de novo bladder pain syndrome following laparoscopy in women with no prior bladder pain syndrome who have and don't have endometriosis;
- Bladder pain at 12 months following laparoscopy in subjects with bladder pain syndrome but no endometriosis.

Method

A prospective cohort study was performed. Women scheduled for laparoscopy for investigation of chronic pelvic pain who met the inclusion criteria were recruited by medical staff. A pre-operative questionnaire was completed and the operation findings were collected. At three, six and twelve months post laparoscopy a repeat symptom questionnaire was sent to participants. The data from all sources was collected and analysed.

Results

A total of 205 patients were recruited between September 2013 and May 2016, with 47 being excluded based on the exclusion criteria. A total of 158 women were included in the survey with 74, 12 month surveys returned. The results of both the primary and secondary outcomes will be included in the presentation at the AGES ASM.

Conclusion

This study is a continuation from the prospective study by Cheng et el in 2011 which highlighted the importance of not only considering bladder pain syndrome as a significant cause of chronic pelvic pain but also the high prevalence of endometriosis in women who meet the criteria for bladder pain syndrome. The findings of this research will be presented at the AGES ASM with the objective of providing further knowledge on the symptom outcomes of women with chronic pelvic pain who undergo laparoscopy.

This research received an AGES Grant in 2016.

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Enhanced recovery after laparoscopic hysterectomy: A comparison of ERAS and conventional models of surgical care in a tertiary gynaecology unit.

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Background: Enhanced recovery after surgery [ERAS] protocols minimise the stress insults of surgery, allowing faster recovery and decreased length of stay [LOS] with an acceptably low complication rate. This approach is useful due to increasing demand for surgery and limited resources.

Aims: To compare LOS and adverse outcomes between ERAS and conventional surgical models of care in gynaecological patients at a single tertiary unit.

Methods: A three-year retrospective study was performed comparing the ERAS and conventional models on all patients undergoing laparoscopic hysterectomy [LH]. The study was powered (80%) to detect a difference of 6 hours in LOS.

Results: Over the study period, 64 patients in the ERAS cohort and 179 patients in the conventional group were analysed. Median age (55 vs 46 ($p<0.001$)), BMI and country of birth (64% vs 36% born in Australia ($p=0.001$)) were significantly different between both cohorts. Median LOS in the ERAS cohort was 2 hours shorter than that of the conventional cohort (54 hours vs 56 hours ($p=0.009$) and was associated with significant decrease in cumulative analgesia use. Country of birth (non-Australian born, $p=0.034$), age (per year, $p=0.006$) and malignant histopathology ($p=0.004$) were all independent risk factors for increased LOS. There was no significant difference in readmission rates or complications between both cohorts.

Conclusion: In this retrospective review, the use of ERAS protocol in gynaecological patients was associated with a minimal decrease in LOS but a significant reduction in postoperative analgesia and no difference in readmission rates or complications. It can be considered a better alternative to conventional surgical practice.

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Perceptions and barriers to optimising laparoscopic ergonomics during minimally invasive surgery in gynaecology

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Background

Minimally invasive and laparoscopic surgical techniques for gynaecological surgery are increasingly utilised across a range of procedures and are an important core skill. Unfortunately injuries to surgeons and theatre staff as a result of these techniques are also increasingly common. Different surgical techniques, operative room setups and specialised equipment can be used to optimise ergonomics during minimally invasive surgery; with an aim to improve efficiency, prevent fatigue and reduce the chance of injury. Despite this knowledge injuries as a result of suboptimal ergonomics still occur.

Aim

This study aims to identify perceived barriers to optimising laparoscopic ergonomics during minimally invasive gynaecology surgery at King Edward Memorial Hospital and develop solutions to address them. It also aims to examine the current level of understanding of equipment and techniques that can be employed to optimise ergonomics and the importance staff place on these strategies.

Methods

This qualitative study involves medical and nursing staff who regularly work in theatre at King Edward Memorial Hospital. An education package was presented to small focus groups alongside a de-identified pre and post education questionnaire. This questionnaire collected information regarding: participant demographics, the degree of importance placed on

optimising ergonomics and which factors were barriers to this. It was administered pre and post the education session in order to detect any changes in attitudes or perceptions that occurred as a result of education. Information was also collected regarding injuries and treatment thought to have resulted from suboptimal ergonomics.

Results

Modifiable barriers to optimising laparoscopic ergonomics identified in our health care setting included lack of education and training in appropriate setup, lack of time and lack of support when requesting changes. Less modifiable barriers identified were availability of specialised equipment, case length and patient body habitus.

Discussion

Whilst some barriers to optimising ergonomics such as patient habitus are difficult to change, other barriers such as lack of education are modifiable. Benefits of the education package reported by staff included increased confidence in requesting set up changes and supporting requested changes. Staff showed an increased willingness to support changes to practice that optimise ergonomics and discussed providing an environment in theatre that supports this. Discussing theatre set up as part of the team time out prior to commencing operative lists has also been adopted. The provision of more ergonomically appropriate instruments, height adjustable beds and step stools, have also occurred as a result of this project.

Major Complications associated with over 1500 operative laparoscopies: a prospective multicenter observational study

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Institutes: Department of Obstetrics & Gynaecology Antrim & Cragiavon Area Hospitals. Northern Ireland

Background: The use of laparoscopy in gynaecology has expanded dramatically in recent years from diagnostic procedures and sterilisation to complete gynaecological operations. As an increasing number of indications for operative gynaecological laparoscopy evolve, the numbers being performed also increase, as does the laparoscopists' skill and experience. Traditionally associated with higher complications than vaginal and abdominal approaches, this is no longer the case. The advantages and safety of this approach are now well established.

Objective: To review the incidence of major complications following operative gynaecological laparoscopic procedures, including visceral/urinary tract/vascular injury and death.

Design and Methods: Prospective multicenter study of 1577 operative gynaecological laparoscopies over a 106 month period, by three advanced benign laparoscopic surgeons. Any unexpected or unplanned event requiring intra-operative or post-operative intervention was defined as a complication and subsequently anaylsed.

Results: Of 1577 laparoscopic procedures, 20 complications occurred (rate 1.26 per 1000). Specifically damage to bowel 0.38% (6/1577), urinary tract 0.38% (6/1577) vascular injury 0.44% (7/1577) and death 0.06% secondary to pulmonary embolism.

Analysis: The timing of recognition of the complications revealed "at entry" 10% (2/20), "intra-operatively" 60% (12/20) and "delayed" 30% (6/20)

The majority of the complications were managed laparoscopically 60% (12/20) with 55% (11/20) successfully managed by the gynaecologists.

Conclusions: Prevention of complications of laparoscopy starts by raising awareness of the risk of this procedure and the precautions necessary to ensure safety. The surest way to reduce complications is to study them.[1] This study shows the overall major complication rate associated with operative gynaecological laparoscopy is low, and compares favourably with those reported in the literature for open and vaginal equivalent procedures. The majority of major complications; can be managed successfully by the gynaecologist, using a laparoscopic approach, therefore avoiding the morbidity associated with laparotomy.

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The operating theatre as classroom: a qualitative study of learning and teaching surgical competencies.

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2. Monash University, Victoria

Background: There has been a worldwide movement toward competency-based medical education and training. However, this is the first qualitative study to analyze the perceptions of surgical trainees and surgeons toward competency-based education in the operating theatre. We aim to examine views toward the specific learning and teaching of the nine competencies of the Royal Australasian College of Surgeons (RACS) and to explore perceived ideal conditions and challenges for learning and teaching these competencies in the operating theatre. **Methods:** Individual semi-structured interviews with surgical trainees and surgeons in the specialty of General Surgery. Ten surgical trainees and surgeons who worked together were purposively sampled, for maximum variation, from an outer metropolitan public hospital in Melbourne, Australia, to identify emergent themes relating to learning and teaching surgical competencies in the operating theatre. **Results:**Five themes were identified as: (1) Learning and teaching specific surgical competencies is through relationship based mentoring and experiential learning; (2) Ideal conditions and challenges in the operating theatre are availability of time and personal attitude; (3) Level of pre-operative briefing was variable; (4) Intra-operative teaching is perceived as structured; and, (5) Post-operative debriefing is recognized as ideal but not consistently performed. **Discussion:** Professional relationships are important to both surgical trainees and surgeons in the process of learning and teaching competencies. Ad hoc *apprenticeship style* learning is perceived to remain prominent in the operating theatre. Sufficient time for training is valued by both groups. The surgical competencies are inherently different to each other. Some appear more difficult to learn and teach in the operating theatre, with technical expertise most readily identified and health advocacy least so. Elements of guided discovery learning and other educational models are described. Further emphasis on structured competency-based teaching methods may be beneficial for surgical trainees, surgeons and other specialties, both in Australia and worldwide.

Is Laparoscopic Nerve Sparing Surgery for Deep Infiltrating Endometriosis Essential to minimise lower urinary tract and bowel dysfunction?

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Is Laparoscopic Nerve Sparing Surgery for Deep Infiltrating Endometriosis Essential to minimise lower urinary tract and bowel dysfunction?

Radical surgery for deep infiltrating endometriosis (DIE) has long lasting effects on bladder and bowel function and subsequent quality of life. Over the past fifteen years, increasing emphasis has been placed on neuropelveology with the aim of minimising post-operative pelvic floor dysfunction[1,3]. This is certainly feasible in reducing surgery related bladder morbidity however; minimising bowel dysfunction may be more complex[1,2,3]. Functional impairment may predate surgery and may not be restored by nerve preservation.

Aim

To compare bladder and bowel dysfunction following excision of DIE using nerve sparing techniques compared to cases where endometriosis excision was from other sites in the pelvis or where nerve sparing strategies could not be implemented due to margin of disease involvement and energy modalities used.

Method

A retrospective cohort study was performed. Participants who had excisional surgery for DIE over the previous 8 years were included. Pelvic floor function was assessed through a validated questionnaire comprising of questions under four domains: urinary voiding dysfunction, difficulty with stool evacuation, urinary stress and urinary urge incontinence.

Results

Of the 208 questionnaires sent, there was a completion rate of 34% (66 questionnaires) and 15 were return to sender. 40 respondents had excision of DIE using nerve-sparing technique. The mean age of the nerve-sparing group was 41 years compared to 37 years in the control group. Parity was evenly matched in both groups.

Results under the four domains were analysed using Wilcox Rank sum test. Voiding dysfunction, evacuation of stool and urinary urgency showed no significant difference between women where nerve-sparing surgery was performed (p=0.30, 0.57, 0.59, respectively). Univariate analyses and logistical regression demonstrated no significant difference in urinary stress incontinence.

Women undergoing nerve-sparing surgery reported a significantly increased rate of urinary symptoms following index surgery (Wilcox Rank sum test z statistic = 2.37, p=0.018). The same was demonstrated in bowel symptoms (Wilcox Rank sum test z statistic = 3.06, p=0.002). This, however was only demonstrated in the short term and there was no significant difference in long term symptoms.

Conclusion

Our study demonstrates that despite employing nerve-sparing techniques for excision of DIE, there was no significant different in bladder or bowel dysfunction. Further research into the impact of preexisting nerve impairment and a comparison of different energy modalities used may be useful to increase our understanding in this area.

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Non-malignant Sequelae Following Uncontained Power Morcellation

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Background: The consequences of intraperitoneal dispersion and incomplete removal of morcellated benign uterine tissue are largely unknown. Research on this phenomenon has been limited to small studies. The goal of this study was to identify the indications for and incidence of repeat surgery, following the performance of uncontained uterine power morcellation for laparoscopic supracervical hysterectomy (LSH). In addition we reviewed the histopathology findings at the time of repeat surgery.

Methods: We performed a systematic retrospective chart review of all patients who underwent (LSH) at Kaiser Permanente Southern California Medical Centers between 2006-2013. We identified a total of 47,010 hysterectomies, of which, 5154 were LSH with uncontained power morcellation. Incident and subsequent operative reports and histopathology were reviewed. Descriptive statistics were performed for the cohort.

Results: The most common diagnosis for primary surgery was leiomyomata and abnormal uterine bleeding. Of the 5154 cases, 279 (5.41%) underwent subsequent surgery with a median of 24+25 months following the index surgery. The most common clinical complaint after primary surgery was pelvic pain (n=73, 26.2%) followed by urogynecological symptoms of prolapse and incontinence (n=77, 24%). The majority (n=92, 43.4%) of subsequent non-urogynecological reoperations resulted in benign pathology. Endometriosis was the most common gynecological diagnosis in 65/212 (30.7%) of patients undergoing reoperation and it was a new diagnosis in 86% (n=57/65) of these cases. The overall frequency of subsequent diagnoses was: endometriosis 65/5154 (1.26%), disseminated leiomyomatosis 18/5154 (0.35%) and malignancy 14/5154 (0.27%) including 3/5154 (0.06%) leiomyosarcoma.

Conclusion(s): Post-operative sequelae resulting in reoperation occurred in 5.4% of patients who had uncontained power morcellation. Morcellation appears to have resulted in new endometriosis in 30 % of patients who underwent a second surgery, this additional information may be beneficial during pre-operative counseling and planning. Further research is required to fully evaluate this finding.

SESSION 6C: FREE COMMUNICATIONS – VIDEO PRESENTATIONS / 1115-1245

Laparoscopic discoid resection of rectal deeply infiltrative endometriosis nodule - Retroperitoneal anatomy of pararectal and retrorectal spaces in nerve-sparing endometriosis surgery

Sarah Choi[1], Dean Conrad[1], Matthew Morgan[1], Stefaan Pacquee[1], Lionel Reftmann[1], Gregory M. Cario[1], Danny Chou[1], David Rosen[1]

1. Sydney Women's Endosurgery Centre, Sydney, NSW

This video presentation showed the surgical footages of laparoscopic complete excision of endometriosis and discoid rectal nodule resection in a 31-year-old nulliparous lady presented with severe dysmenorrhoea (pain score 9/10), deep dyspareunia (7/10) and dyschezia (6/10) refractory to medical treatment. Pre-operative deep endometriosis ultrasound scan showed a 2+cm endometriosis rectal nodule involving muscularis. A discoid nodule excision with circular stapler was eventually carried out as minimally invasive approach.

The surgical steps of nerve-sparing endometriosis excision technique (1) are demonstrated. The presentation also focuses on the surgical anatomy of retroperitoneal spaces, ureter, vascular system and sympathetic pelvic nerves applicable to rectal resection for deeply infiltrative endometriosis. The laparoscopic anatomy is compared to traditional topographic anatomy with surgical footages and anatomical illustrations.

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Retropubic tension free vaginal tape insertion under laparoscopic vision.

Dean H Conrad[1], Tal Saar[1], Stefaan Pacquee[1], Danny Chou[1], Greg Cario[1], David Rosen[1]

1. SWEC, Sydney

Synthetic mesh mid urethral slings (MUS) are considered the current gold standard treatment for stress urinary incontinence (SUI). Since it was first described by Ulmsted et al. in 1996 (1), the retropubic tension free vaginal tape (TVT) has been extensively researched, with numerous high-quality trials demonstrating a good safety profile with high long-term efficacy (2). Nevertheless, recent high profile lawsuits and subsequent media attention surrounding vaginal mesh products for treatment of prolapse has placed pressure to ban all mesh products including the MUS. The RANZCOG position statement currently supports the use of MUS, but highlights the need to obtain appropriate surgical training and demonstrate knowledge of operative complications (3).

This video demonstrates the case of a 55 year old female who presented as a tertiary referral for severe SUI and prolapse 1 year following a failed anterior, posterior and vaginal vault repair. Examination revealed a stage 3 cystocele, a stage 2 rectocele and a stage 2 vault prolapse. Urodynamics confirmed the presence of marked SUI with intrinsic sphincter deficiency. A laparoscopic sacrocolpopexy was performed in conjunction with a TVT under direct laparoscopic vision. This unique perspective allows the path of the trocar to be visualised as it passes through the space of Retzius, providing an improved understanding of anatomical relations and potential complications that may be encountered.

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Laparoscopic repair of caesarean scar defect

Dean Conrad[1], Tal Saar[1], Karen Kong[2], Stefaan Pacquee[1], David Rosen[1], Gregory Cario[1], Danny Chou[1], Michael Chapman[1, 2]

1. SWEC, Sydney

2. IVF Australia, Sydney

Caesarean scar defect, or isthmocele, is a reservoir type pouch on the anterior wall of the uterine isthmus caused by inappropriate healing of the lower segment incision after caesarean section (1). The incidence of caesarean scar defects is reported to be as high as 84%, and is increasing due to the rising rates of caesarean sections worldwide (2). Caesarean scar defects may be asymptomatic, or cause a number of gynaecologic and obstetric sequealae, including abnormal bleeding, pelvic pain, infertility and ectopic scar pregnancy (3). There is no current consensus on the ideal treatment for caesarean scar defects, with most evidence being limited to case reports.

This video demonstrates the case of a 32 year old para 3 female (three previous caesarean sections) who presented with a caesarean scar ectopic on routine first trimester ultrasound scan. Emergency laparoscopic surgery was performed to evacuate her ectopic pregnancy. Follow up imaging with hysterosalpingogram and pelvic ultrasound confirmed the presence of a caesarean scar defect. She underwent definitive treatment 3 months after her initial surgery with laparoscopic excision of the caesarean scar defect under hysteroscopic guidance.

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Hanging by a Thread: Uterosacral Ligament Suspension

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Women have a 40% lifetime risk of pelvic organ prolapse, of whom 11-20% will go on to have surgery.[1] There have been recent controversies regarding the use of mesh in vaginal prolapse repair. Research indicates that the use of mesh results in improved prolapse symptoms and examination findings as compared with native tissue repair. The use of mesh, however, also has significantly increased risks of mesh complications, bladder injuries, and needing repeat surgeries to address these issues, which then also have their own risks.[2] Because there is no robust evidence to support the position that the benefits of mesh outweigh the risks related to their use for primary surgical prolapse repair, transvaginal mesh products for prolapse have been withdrawn from the Australian market recently. As a result, there has been a renewed interest in native tissue repair techniques.[3] It must be recognized, however, that these procedures, whilst very successful in managing uterovaginal prolapse and post-hysterectomy vaginal prolapse, are not without their own limitations and complications.

This video demonstrates uterosacral ligament suspension at the time of total laparoscopic hysterectomy. Uterosacral ligament suspension is one type of native tissue repair technique for apical prolapse; it can be performed through several methods including transvaginal, abdominal, laparoscopic and robotic-assisted approaches. This presentation will review the literature regarding the use of uterosacral ligament suspension to manage pelvic organ prolapse. This presentation will also discuss the different techniques and surgical approaches, surgical considerations to this procedure, and perioperative outcomes.

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Laparoscopic uterine artery ligation prior to removal of Caesarean scar ectopic pregnancy to minimise blood loss

Stephen Lee[1]

1. Royal Women's Hospital, Glen Iris, VIC, Australia

The rate of births by Caesarean section is increasing. In 2015, 33.4% of Victorian women gave birth by Caesarean section. In comparison, the rate of births by Caesarean section in Victoria was 16% in 1985 (CCOPMM 2017). The prevalence of Caesarean scar ectopic pregnancies is estimated to be 1 in 2000 pregnancies, or 6% of all ectopic pregnancies (Fritz and Speroff 2011). Both the prevalence of Caesarean scar ectopic pregnancies and the proportion of ectopic pregnancies diagnosed as Caesarean scan ectopic pregnancy is thought to be increasing.

We present a 39 year-old patient with a history of one previous Caesarean section who presented to the emergency department with vaginal bleeding 4 weeks and 3 days after embryo transfer. On admission, her quantitative beta HCG was found to be 215000 IU/L and a subsequent pelvic ultrasound confirmed the diagnosis of a live Caesarean scar ectopic pregnancy. Despite a single dose intra-gestational sac and three doses of systemic methotrexate, the patient's beta HCG continued to rise and a decision was made for surgical management.

At surgery, the pelvic side walls were entered by dividing the round ligaments bilaterally. The bladder peritoneum was carefully dissected to expose the Caesarean scar ectopic pregnancy. Bilateral ureterolysis was performed and the uterine arteries exposed and ligated bilaterally with laparoscopic clip applicators. The Caesarean scar ectopic pregnancy, along with the Caesarean section scar was excised and the uterine defect repaired in layers to reduce the possibility of recurrence. Estimated blood loss was 700mL.

The patient required the transfusion of one unit of packed red blood cells intra-operatively but enjoyed an uncomplicated postoperative course. Her beta HCG levels were monitored on a weekly basis and became negative after 5 weeks. The patient was made aware of the implications of bilateral uterine artery ligation on future pregnancies.

This video presentation demonstrates the technique and effectiveness of laparoscopically ligating the uterine arteries prior to excision of the Caesarean scar ectopic pregnancy. We believe that it is worthwhile exposing the uterine arteries for quick clip ligation for protection against excessive blood loss at removal of Caesarean scar ectopic pregnancies.

1. CCOPMM (2017). Victoria's mothers, babies and children 2014 and 2015. D. o. H. a. H. Services. Melbourne, Victorian Government.

2. Fritz, M. A. and L. Speroff (2011). Clinical gynecologic endocrinology and infertility. Philadelphia, Wolters Kluwer Health/Lippincott Williams & Wilkins

Multi-disciplinary management of deep infiltrative endometriosis causing ureteric obstruction and hydronephrosis using DaVinci Robotic surgery for resection and uretero-vesical re-implanation with Psoas hitch

Alan Lam[1], Justin Lam[1], Valerie To[1], Jessica Lowe[1], Justin Vaff, Yasser Salama

1. Centre for Advanced Reproductive Endosurgery, St. Leonards, NSW, Australia

Background: Urinary tract endometriosis involvement varies widely from series to series, with reported incidence varying from 0.3 to 15%. Delayed presentation and recognition may result ureteric obstruction and irreversible renal damage.

Materials: the patient is a 38 yo P2 lady who had 2 previous C-section deliveries. She was discovered to have an obstructed left ureter and left hyronephrosis after presenting to emergency department with acute left flank pain. Hesitant to have surgery, the patient sought multiple specialist opinions before consenting to undergo surgical management.

Aim: a case video presentation to demonstrate

- The importance of careful assessment and pre-operative counselling

- The use of ultrasound, CT and MRI for assessment of multi-organ and ureteric endometriosis
- The feasibility and benefits of Xi DaVinci robotic platform in multi-disciplinary approach for resection of ureteric obstruction and uretero-vesical re-implanation with Psoas hitch

Indocyanine Green for Sentinel Lymph Node Mapping in uterine cancer: video presentation

Rose McDonnell[1], **Stuart Salfinger**[1, 2]

1. KEMH, Perth, WA, Australia

2. St John of God Hospital, Subiaco, WA, Australia

Background

Sentinel lymph node detection and biopsy enables detection of nodal disease without the risks of pelvic lymphadenectomy. This video will demonstrate how the sentinel node is identified using a fluorescent dye known as Indocyanine Green (ICG) and a near-infrared camera in a patient with endometrial cancer. This highlights the improved visualisation of the anatomy and lymphatic drainage in the pelvic sidewall.

Systematic pelvic lymphadenectomy has been associated with increased morbidity including lymphocyst formation, lymphoedema in up to 20% of women, and varying degrees of both short and long-term neuralgia and has not been shown to improve survival; therefore in Australia a complete node dissection in most patients is avoided even when the risk of nodal involvement remains.

Sentinel lymph node (SLN) mapping decreases morbidity and optimizes the pathologic assessment of identified nodes in women with endometrial cancer. Furthermore it increases the detection of lymphatic metastases, which can be present in up to 5% of women, when compared to staging lymphadenectomy [1], and, is associated with significantly lower blood loss and shorter operating time [2].

Method

High definition stereoscopic camera connected to a 0°/30° 10 mm scope equipped with a specific lens and light source emitting both visible and near infra-red (NIR) light is used. The cervix is injected after routine preparation and draping of the patient at positions 3 and 9 o'clock using 2ml of ICG solution (0.5mg/ml) to each side. Following this the laparoscopic procedure will follow with the expectation that the nodes should be visible within 10-15 minutes of the injection.

Results

A SLN algorithm is now included in the NCCN Guidelines for Endometrial Carcinoma with category 3 evidence [3,4]. The reported detection rate of SLNs with ICG is reported to be up to 97% [3]. Unilateral SLN detection rates with ICG have been reported at 100% with sensitivity and specificity reported between 93.7% and 100% [2].

Conclusion

SLN mapping using ICG will lead to a better informed decision-making process regarding adjuvant therapy, significantly lower short- and long-term morbidity, and decreased risk of both positive undiagnosed and untreated pelvic lymph nodes and overtreating of pelvic nodes which are suspected but clear of cancer.

1. Robert W. Holloway , Sarika Gupta, Nicole M. Stavitzski, Xiang Zhu, Erica L.Takimoto, Ajit Gubbi, Glenn E. Bigsby, Lorna A. Brudie, James E. Kendrick, Sarfraz Ahmad. Sentinel lymph node mapping with staging lymphadenectomyfor patients with endometrial cancer increases the detection of metastasis. Gynecologic Oncology. Received 19 January 2016, Revised 12 February 2016,Accepted 16 February 2016, Available online 2 March 2016
2. Papadia A, Imboden S, Siegenthaler F, Gasparri ML, Mohr S, Lanz S, Mueller Laparoscopic Indocyanine Green Sentinel Lymph Node Mapping in Endometrial Cancer. Ann Surg Oncol. 2016 Jan 20. [Epub ahead of print]
3. Barlin JN, Khoury-Collado F, Kim CH, et al. The importance of applying a sentinel lymph node mapping algorithm in endometrial cancer staging: Beyond removal of blue nodes. Gynecol. Oncol. 2012; 125: 531-535.

Parasitic leiomyoma: a case report

Tal Saar[1], Dean Conrad[1], Stefaan Pacquee[1], Greg Cario[1], David Rosen[1], Danny Chou[1]

1. SWEC, Sydney Women's Endosurgery Centre, Kogarah, NSW, Australia

Uterine leiomyomas are the most common benign pelvic tumours in women, occurring in at least 25% of reproductive aged women and up to 80% on pathologic examination of surgically removed uteri.[1] Parasitic leiomyomas, first described in 1909, are a rare type of extra-uterine fibroid which are thought to arise from a subserosal fibroid which obtains a blood supply from other structures with resultant deterioration of its uterine pedicle. The rise of laparoscopic surgery and power morcellation has seen an increasing incidence of the iatrogenic parasitic fibroid[2]. The FDA has put a warning on the use of power morcellation[3] due to the risk of disseminating a uterine sarcoma, which has resulted in a drastic decline in the use of power morcellation and the entry of "morcellation bags" into the market.

This video demonstrates the case of a 40 year old para 2 patient presenting with a rapidly growing 11cm fibroid 8 years after a laparoscopic myomectomy with power morcellation for treatment of menorrhagia. Intra operative findings demonstrated a parasitic fibroid with a single source of vascular supply arising from Right Infudibulopelvic ligament. The fibroid was excised by ligation of the pedicle and in bag power morcellation.

1. Payson M, Leppert P, Segars J. Epidemiology of myomas. Obstet Gynecol Clin North Am 2006;33:1–11
2. Lete I., Parasitic leiomyomas: a systematic review. European Journal of Obstetrics & Gynecology and Reproductive Biology, 203 (2016) 250-259.
3. Laparoscopic Uterine Power Morcellation in Hysterectomy and Myomectomy: FDA Safety Communication. April 2014

Pushing the limits of robotic surgery for removal of massive fibroid

Alan Lam[1], Jessica Lowe[1], Valerie To[1]

1. Centre for Advanced Reproductive Endosurgery, Sydney, NSW, Australia

The patient, a 40yo nullipara, was symptomatic with pain, heavy menstrual bleeding and gastrointestinal side effects thought to be due to rapidly enlarging fibroids. The patient's uterus was grossly enlarged to a 34-week gestation size. Ultrasound showed a 1521cc uterus with at least 4 fibroids, the largest 17cm then 6.5cm, 3.5cm and 2.4cm, exact location difficult to confirm but all thought to be in the posterior wall.

The patient was very keen to preserve her uterus and optimise future fertility. She was also keen to avoid a midline laparotomy. Laparoscopic approach was deemed unsuitable due to limited access. And so, after extensive discussion and evaluation of the benefits and disadvantages of the routes of surgery, tissue extraction methods and risk of hysterectomy, the patient chose the robotic approach.

While the total procedure time was significant, the operation was completed successfully with an acceptable blood loss (Hb dropped from 12.2g/dL to 10.4g/dL) and no transfusion was required. She was discharged home day 2 and had an uneventful recovery. The fibroids weighed 1700g.

In this video we highlight several critical learning points which made it possible to successfully remove such huge fibroids:

- primary port entry at xiphisternum
- high placement of working ports below the rib cage
- full utilisation of the dexterity and manoeuvrability of the endowristed instruments
- the benefit of robotic assisted single-tooth retraction
- the importance of maintaining orientation throughout the case
- the comfort and benefits of endowristed needles in uterine wall reconstruction

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SESSION 7A: FIBROIDS OF THE FUTURE / 1415-1600

Fibroids: Does Size Matter?

Barbara Levy

Myomectomy…how big is too big?

Location, location, location is true when approaching myomectomy as well as real estate. Managing one large fibroid is a substantively different operation than approaching the same size uterus with tens or hundreds of small tumors. Optimizing patient management includes: 1) eliminating anemia before attempting surgery 2) understanding the patient's goal for surgery – reducing bleeding? – reducing bulk symptoms? – fertility? Each will demand transparent, evidence-based discussion and shared decision-making between the surgeon and patient.

Objectives:

Understand the pre-operative work-up to optimize patient outcomes for myomectomy

Understand the indications for surgery related to myomas

Incorporate evidence-based decision support for the approach to myomectomy

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Specimen Retrieval: It's in the Bag (or is it?)

Amani Harris

Patients benefit from many of the advantages of laparoscopic surgery when compared with open surgery for benign disease, such as a quicker recovery with a shorter hospital stay, less intra-operative blood loss, risk of infection and post-operative pain. However, specimen retrieval at laparoscopic surgery, especially of fibroids and uteri poses a challenge in view of the 2014 FDA warning regarding leiomyosarcoma dissemination with power morcellation. This discussion will explore the latest evidence on this topic and compare the risks and benefits of different techniques: power, vaginal and in-bag morcellation, in addition to other methods of specimen retrieval, such as pfanennsteil incision and posterior colpotomy, incorporating video demonstrations.

Fibroids, Fertility and the Fetus: What Happens Post Treatment?

Michael Rasmussen

Fibroids are common. Fibroids may impact on fertility and obstetric outcomes, but often do not. Deciding which fibroids may be of obstetric concern requires consideration of all patient circumstances, more so than the details of the fibroids themselves. Fibroids can be of significant impact at the time of any caesarean delivery, and specific care is required. Myomectomy may impact on subsequent obstetric outcomes. Uterine rupture is rare but can be catastrophic, and is not per se avoided by a decision for Cesarean birth. The technique of myomectomy may impact on the risk of subsequent rupture. Non surgical techniques of fibroid management offer promise for the patient desiring to preserve fertility, however further study is required to asses their role and safety.

Medical Management of Fibroids: Did Someone Say SPERM?

Jim Tsaltas

Abstract not yet received.

Minimally Invasive Techniques

Jade Acton

Patients desire effective therapy for their symptomatic fibroids with the least amount of intervention and the shortest recovery possible. Within Australia, only two non-surgical techniques exist. Uterine artery emobolisation (UAE) has been used for more than 20 years with good success. Clinical trials demonstrate similar outcomes for quality of life (QOL) scores when compared to surgical approaches, but higher reoperation rates long term. Magnetic Resonance-guided Focused Ultrasound (MRgFUS) involves focussed ultrasound beam on the fibroid which heats it to a temperature which results in tissue necrosis. It requires no surgical intervention, but has several exclusion criteria. Overall, it has lower QOL and higher re-oepration rates than UAE.

Laparoscopic and hysteroscopic radiofrequency ablation (RFA) devices are not available in Australia. RFA uses monopolar current at frequencies between 300 kHz and 500 kHz to heat tissue to 80C to 105C, which results in coagulation and necrosis of tissue. Laparoscopic RFA devices have shown a significant reduction in menstrual bleeding and fibroid volume and significant improvements in quality of life. RFA had similar outcomes when compared to laparoscopic myomectomy. Transcervical RFA has also shown significant reductions in fibroid volume, menstral blood loss and symptoms scores at 12 months follow up and further studies are currently being undertaken.

There is minimal evidence available for fertility after these procedures.

Fibroid Surgery: The Old Versus the New

Lionel Reyftmann

The availability of hysteroscopic tissue morcellation systems that are effective, disposable and relatively safer compared to the conventional resectoscopes has revolutionised the management of sub mucosal fibroids. These morcellators have gained rapid acceptance, and have been widely embraced around the world and particularly in Australia.

The ability to remove the resected chips from the operative field allows the operator to morcellate rapidly even voluminous myoma of limited access. This modern armamentarium has changed the game and can be considered as the “New surgery”. However, the resection of type 1 and type 2 sub mucosal fibroids, especially in the fundal and cornual position remains a challenge, and the use of conventional equipment may still be required. The conventional “Old Surgery” could nevertheless become a dying art, due to the rapid uptake of the morcellation systems, which may deskill the operators, and prevent the trainees to be exposed to complex resections.

This presentation will address some of these issues in terms of surgical training, procedural effectiveness, and complications.

A review of the modern techniques using the conventional equipment (cold loop dissection, bipolar radiofrequency needles, interposition of anti adhesions, ultrasound mapping and perioperative guidance) will hopefully convince the audience that the Old and the New should not be opposed, but in fact taught conjointly. A special emphasis will be put on techniques bridging the “Old and the New” like the combination of bipolar conventional resection with miniature equipment and the use of tissue removal systems.

SESSION 7B: ADENOMYOSIS AND SURGICAL REFLECTION / 1415-1600

TED Talk: Anatomy of a complication…A personal journey

Peter Maher

Abstract not yet received.

Adenomyosis: From Classification to Conception

Martin Healey

Adenomyosis is plagued by the presence of several different diagnostic definitions, all based on histology of the uterus. There have been a number of classification systems proposed, which will be discussed. The relationship between adenomyosis and natural fertility is a scientific vacuum, while in the field of IVF evidence is emerging that adenomyosis results in poorer outcomes both in live birth rates and pregnancy complications. Possible treatment options for this situation will be covered.

Adenomyomas: Hot tips and surgical tricks

Stephen Lyons

This presentation will focus on contemporary fertility-sparing surgical management of adenomyosis. The current medical literature on surgical techniques for the management of the various types of adenomyosis/adenomyomas will be reviewed. The presentation will draw heavily on appropriate diagrams, photographic images and videos to illustrate the surgical procedures. Pros and cons for each procedure will be discussed. Non-surgical treatments of adenomyosis are not part of the brief for this talk and will be discussed in other presentations in this session.

That's Not A Knife!" Non-Surgical Management of Adenomyosis

Catarina Ang

Adenomyosis is a common gynaecologic condition defined by the presence of ectopic endometrial glands and stroma within the myometrium. It has a range of clinical presentations, the most common being heavy menstrual bleeding and dysmenorrhoea. However, the majority of patients are asymptomatic.

Whilst difficult to diagnose definitively, it is commonly agreed there is a loss of integrity in the junctional zone between endometrium and myometrium, which can be seen on transvaginal ultrasound and magnetic resonance imaging.

Similar to endometriosis, this is an oestrogen-dependent disease. Thus, systemic therapies that are effective for endometriosis have also been effective for the treatment of symptoms of adenomyosis. This review will discuss medical therapies for the condition including the continuous use of oral contraceptive pills, high-dose progestogens, selective oestrogen/progestogen receptor modulators, selective progesterone receptor modulators, the levonorgestrel-releasing intrauterine device, aromatase inhibitors, and gonadotrophin receptor hormone agonists.

Medical therapies can all temporarily reduce symptoms and induce regression. However, they do not allow the patient to conceive. Evidence for the use of MRgFUS, HIFU, and UAE will also be described, with their evidence base.

In summary, there are a limited number of options for the non-surgical management of adenomyosis. Hysterectomy remains the "gold stanard" and definitive treatment for the condition.

The Many Faces of Adenomyosis - How Medical Imaging can Assist the Gynaecologist

Kate Stone, **Natalie Yang**

Recent advancements in specialist ultrasound has improved the detection of deep infiltrating endometriosis, but has ultrasound improved in the detection of adenomyosis ? The performance of ultrasound in the diagnosis of adenomyosis will be discussed as part of an integrated assessment of endometriosis.

Magnetic resonance (MR) imaging is a non-invasive modality with high sensitivity and high specificity for the diagnosis of adenomyosis. This talk will cover the basics of MR sequences that best optimise for the detection and characterisation of adenomyosis. In addition to covering the "classic" MR appearances of adenomyosis, atypical MR manifestations, pitfalls in MR diagnosis and issues surrounding coexistent malignancy will also be discussed.

Surgical Education: Evolution or Revolution?

Kym Jansen

Abstract not yet received.

SESSION 8: DAN O'CONNOR PERPETUAL LECTURE / 1630-1700

Gynaecological Surgery: The Evolution Towards Excellence

Tom Jobling

The evolution of gynaecological surgery has undergone a massive change in the past thirty years with the introduction of operative laparoscopy and robotic surgery. Surgical procedures such as complex endometriosis surgery and cancer surgery have evolved to a level where the decision about mode of surgery has almost turned on its head and many patients, especially with hysterectomy for cancer of the cervix or uterus, will be candidates for endoscopic management rather than a reflex open surgical option.

Massive changes in technology have allowed this to occur, resulting in changes in peri-operative morbidity, especially in the morbidly obese, and a reduction in debilitating wound infections and subsequent incisional hernia development.

The future for endoscopic surgery is indeed bright and will continue to evolve with improving technology and, in particular, sophisticated retrieval systems for specimen removal. The challenges of morbid obesity continue to be the biggest impediment to successful endoscopic surgery.

SATURDAY MARCH 10

SESSION 9A: HOW CAN I MAKE MY PRACTICE EXCELLENT? / 0800-0930

Publish or Perish? Just Write!

Paul Cohen

Want to get published but don't know how? This presentation will outline the steps to writing a manuscript that journal editors will take seriously and maximise your chances of getting published!

Show Me the Numbers: A Concise Guide to Statistics and Paper Analysis for Surgeons

Gary Frishman

Upon attendance of this talk, the practicing surgeon will be able to objectively review manuscript for its validity and applicability to their practice.

Evolution of the Modern Practice: Get Your Head out of the Cloud, let the Genie out of the Bottle

Michael Wynn-Williams

The use of information technology in medical practice has exponentially increased in the last ten years. With the advent of powerful multifunction computer platforms disguised as telephones that hide in our pockets, we have never been more constantly connected to our chosen field of employment. Depending on your age, you may see this as a blessing or a curse.

A multitude of different business and medical applications (apps) have been developed that will synchronise across many different operating systems using "the cloud". This presentation will demonstrate how the use of a number of these key applications can allow the modern busy O&G support their practice. It will include apps that can save time, money and energy, rather than allowing technology to consume their valuable free time. The implications of the new privacy laws on the use of mobile devices and apps to manage patient data will be discussed.

The app discussed during this presentation can be found by clicking the link, https://goo.gl/VAhDQP

Protecting Your Private Parts: Privacy Legislation in Obstetrics and Gynaecology

Anusch Yazdani

The Privacy Act 1988 (Privacy Act) is an Australian law which regulates the handling of information or an opinion about an identified individual, or an individual who is reasonably identifiable. In a health service, this law pertains to the following information:

(a) information or an opinion about:

(i) the health, including an illness, disability or injury, (at any time) of an individual; or

(ii) an individual's expressed wishes about the future provision of health services to the individual; or

(iii) a health service provided, or to be provided, to an individual; that is also personal information;

(b) other personal information collected to provide, or in providing, a health service to an individual;

(c) other personal information collected in connection with the donation, or intended donation, by an individual of his or her body parts, organs or body substances;

(d) genetic information about an individual in a form that is, or could be, predictive of the health of the individual or a genetic relative of the individual.

Uniquely to obstetrics and gynaecology, the information about an individual (the patient) is often intimately related to information pertaining to other parties (such as his/her partner / parents and descendants). Furthermore, medical research has specific safeguards for the collection and management of health information.

Schedule 1 of the Privacy Act includes thirteen Australian Privacy Principles (APPs) which set out standards, rights and obligations for the handling, holding, use, accessing and correction of personal information (including sensitive information). These principles apply specifically to medical information.

Health services need to be aware of their obligations under the Privacy Act, the consequences of failure to comply and the recently introduced data breach notification obligations when a data breach is likely to result in serious harm to any individual.

SurgicalPerformance: How are We Doing?

Andreas Obermair

The problem: Before SurgicalPerformance was available, clinicians had no way to find out how well their patients are doing clinically.

The solution: SurgicalPerformance is a clinician-based community of users. It is independent of any central, controlling or administrative entity, including AGES or the College. SurgicalPerformance collects clinically meaningful information including outcomes and confounders of outcomes. Data entry is the responsibility of the clinician and in return they receive accurate and risk-adjusted outcomes including comparative data for benchmarking. Confidentiality is maintained throughout to allow for threat-free learning.

SurgicalPerformance transforms data into knowledge and empowers O&G colleagues to collect and manage their own clinical data. We will demonstrate examples of how knowledge can empower our O&G colleagues in Australia and New Zealand.

AGES engaged with SurgicalPerformance and funds their members' SurgicalPerformance subscriptions. An update will be provided on subscription numbers, number of cases entered and PRA points collected.

SESSION 9B: OBESITY AND SURGERY/ 0800-0930

Obesity Surgery: Any tricks Up Your Sleeve?

Liang Low

Abstract not yet received.

Surgery: Success when there is excess

Adam Pendlebury

Challenges due to the rising incidence of obesity in modern gynaecology patients will be outlined. Specific insights regarding minimally invasive approaches to the obese patient will be delineated. Pre-operative strategies for success will be evaluated. With an emphasis on minimally invasive hysterectomy specific tips and tricks regarding optimising ergonomics, patient positioning, instrumentation, maximising the use of the theatre team and variations to surgical approach will be described.

Bitten off More Than You Can Chew? An Endocrinologists Approach

Cilla Haywood

Obesity is a very common disease which is increasing in prevalence and severity. Public health measures may be used for prevention but are ineffective for treatment. Body weight is vigorously defended via several physiological mechanisms, and weight regain occurs in 90% of those who lost weight, regardless of the tempo of weight loss. The most effective medical weight loss strategy involves a period of rapid weight loss achieved with a very low calorie died (VLCD), with the assistance of an appetite suppressant such as topiramate, a GLP-1 agonist or phentermine.

PCOS: Too Many Eggs in my Basket

Rachael Knight

Polycystic ovarian syndrome is one of the most common conditions affecting Australian women and the commonest endocrine condition affecting women of reproductive age. The prevalence in Australia is between 12 - 21% with the highest rates in the indigenous population. Recently several paradigms have been challenged and this presentation will focus on up to date management including the recommendations regarding the current use of Metformin and the role of laparoscopic surgery in Polycystic Ovarian Syndrome.

Large Problems on the Labour Ward

Rachel Green

With obesity rates rising, the number of pregnant women with obesity is reaching an all time high. Data from Queensland Health now suggests close to 40% of women booking at antenatal clinic are either overweight or obese. The number of pregnant women with extreme obesity is also increasing.

This leads to many increased risks from preconception, throughout pregnancy and during delivery. How do we manage a pregnancy in such circumstances? What are the special considerations when the mother is obese? What are the neonatal risks and what can we do to ensure a safe delivery for both mother and infant?

This talk will focus on practical solutions for management of obesity in pregnancy and intrapartum care.

SESSION 10: EXCELLENCE IN HYSTERECTOMY/ 1000-1145

KEYNOTE: Vaginal Hysterectomy: Back to the Future

Barbara Levy

Vaginal hysterectomy is the optimal route as determined by Cochrane and ACOG. Why are fewer and fewer being performed? This lecture will review the challenges of performing vaginal hysterectomy and provide new technology solutions for many of those challenges. Video will illustrate the main points for addressing uterine volume reduction and access to the anterior cul de sac.

Objectives:

Describe optimal approach for hysterectomy

Demonstrate techniques for vaginal hysterectomy
Discuss common contraindications to vaginal hysterectomy
Describe approaches to facilitate a vaginal approach in challenging cases
Describe how to avoid complications
Video tips and tricks

Laparoscopic Hysterectomy: There's more than one way

Ted Lee

Laparoscopic hysterectomy is a proven minimally invasive approach to hysterectomy. Single incision laparoscopic surgery was developed over 10 years ago as an effort to improve cosmesis. Single incision laparoscopic hysterectomy never become widespread because of the difficulty associated with procedure due to lack of triangulation, instrument crowding, insufficient traction and counter traction. By incorporating mini-laparoscopy and single incision laparoscopic surgery, a hybrid procedure which I called "single port plus" enable the surgeon to use conventional laparoscopic techniques to perform hysterectomy while improving cosmesis.

Hysterectomy – Who should be doing it?

Stuart Salfinger

Andrew Walters the president of the Society of Gynaecologic Surgeons states "Every woman deserves a high-volume gynecologic surgeon". David Urbach in The New England Journal of Medicine discussed the "Pledge" to eliminate low volume surgery. Is any of this feasible or desirable?

Training numbers & case numbers - this balance has been becoming more and more unbalanced over the past decade. Trainee numbers have increased significantly with at the same time a decrease in surgical exposure thanks to advances in technology and increasing subspecialisation. Does the level of training make a difference or is it down to the decade of experience?

Case volume is a key determinate of surgical outcomes. International and Australian data confirm this but how do we translate this into practice and where do we move forwards from here. What are the current outcome measures and how many cases do we need to do to remain proficient.

Given this how do we effectively train the next generation?

Pain relief for Hysterectomy

Mark Alter

Abstract not yet received.

Global Trends in Hysterectomy

Pietro Santulli, L Marcellin, C Maignien, M Bourdon, B Borghese, C Chapron

Université Paris Descartes, Sorbone Paris Cité, Faculté de Médecine, Assistance Publique – Hôpitaux de Paris (AP- HP), Groupe Hospitalier Universitaire (GHU) Ouest, Centre Hospitalier Universitaire (CHU) Cochin, Department of Gynecology Obstetrics II and Reproductive Medicine (Professor Chapron), Paris, France.

Hysterectomy is actually considered one of the most common major surgical procedures performed in women. An estimated half million hysterectomy procedures are performed each year in the United States. The majority of cases are performed for benign gynecologic conditions, including uterine leiomyomata, endometriosis, abnormal menstrual bleeding, and pelvic organ prolapse accounting for more than 90% of all hysterectomies; malignant disease, such as uterine cancer, cervical cancer, and ovarian cancer, account for the remaining 10%.

The first case of laparoscopic- assisted hysterectomy was published by Reich and colleagues in 1989. Since that time, trends have changed as the proportion of laparoscopic approaches to hysterectomy have increased throughout the world while abdominal hysterectomies have decreased. Minimally invasive surgery (MIS) approaches–including laparoscopic hysterectomy, vaginal hysterectomy, and robotic-assisted hysterectomy are becoming increasingly common as compared

to abdominal hysterectomy even for complex cases, which is supported by improvements in surgical equipment and emerging developments in specialized training programs.

More clearly compared with abdominal laparotomy, utilization of minimally invasive surgeries is preferred as they result in decreased medical and surgical perioperative complications, shorter hospital stays, faster return to normal activities, improved patient quality of life and lowers health care costs.

Hysterectomy may also include a bilateral oophorectomy. The proportion of women undergoing bilateral oophorectomy concomitant with hysterectomy differs among countries and increases by age in most countries. In addition the percentage of subtotal hysterectomies in the last decade decreased in most of the countries in favour of total hysterectomy.

In some countries, the hysterectomy incidence rate has been reported to decline over time. This decrease is likely due to increased use of pharmacologic therapies and uterine-sparing procedures (ablative methods, hysteroscopic procedures) for gynaecologic conditions, especially abnormal bleeding disorders and leiomyomata.

However, given the increased mean age at hysterectomy over the last years, conservative treatment does not completely avert hysterectomy but, to some extent, postpones it until later ages.

Furthers explanations for such reduction in surgical volume of hysterectomies worldwide include the recent increase in the number of minimally invasive hysterectomies being performed as outpatient procedures.

Last but not least the use of enhanced recovery pathway decrease the mean lenght of stay, improve pain scores, and reduce hospital costs, without increasing perioperative complications. The use of such systematic implementation of evidence-based perioperative care protocol, support the more widespread use and application of outpatients procedures in the future.

SESSION 11: PRESIDENT'S PANEL / 1145-1245

Panel: Jamila Rizvi, Debra Nestel and Jason Abbott

DIGITAL FREE COMMUNICATIONS

Laparoscopic cystectomy during pregnancy - optimising risky surgery.

Lima Arsala[1], Shamitha Kathurusinghe [1], Catarina W Ang[1]

1. Gynaecology Department , Royal Women's Hospital , Parkville , Victoria , Australia

The widespread use of ultrasonography in pregnancy has led to an increase in the detection of ovarian cysts in pregnant women. The majority of these are benign and only require surgical management if they are associated with pain, torsion or an increase in size. The optimal approach to surgical management is via laparoscopic excision, as opposed to laparotomy, which is associated with increased hospital stay, blood loss and post-operative pain[1]. Herein, we discuss a case of second trimester laparoscopic cystectomy of a 10cm benign ovarian cyst. We illustrate, with the aid of video demonstration, techniques of approach to laparoscopic cystectomy during pregnancy in order to recognise anatomical variations, minimise iatrogenic cysts spill and trauma to the uterus, reducing both maternal and fetal risk. With increased surgical caseload and innovative minimally invasive surgical technique for cystectomy, we anticipate this will become the gold standard approach.

1. 1 Chen L, Ding J, Hua K. Comparative analysis of laparoscopy versus laparotomy in the management of ovarian cyst during pregnancy. J Obstet Gynaecol Res. 2014 Mar;40(3):763-9.

Anti-N-methyl-D-aspartate receptor (anti-NMDAR) encephalitis associated with ovarian teratoma: Case report and review of the literature.

Joseph Boustany[1], Nina Reza Pour[1], Jyothi Marry[1]

1. Liverpool Hospital, Liverpool, NSW, Australia

Introduction: Anti-N-methyl-D-aspartate receptor encephalitis is a recently identified paraneoplastic limbic encephalitis. The incidence is still unknown. Approximately 90% of patients are female, and more than 50% are associated with ovarian teratoma. Patients usually present with rapidly progressive neuropsychiatric symptoms, memory deficits, seizures, dyskinesia, autonomic instability, and coma.

Case Report: A 25 year-old nulliparous female presented with one-week history of abnormal behaviour and headache. Initial examinations and investigations including brain computerized tomography (CT) were all inconclusive. She was admitted for further evaluation. Day 3 of admission, she developed signs of autoimmune instability and seizures with gradual decline in GCS, which led to the Intensive Care Unit (ICU) admission. Cerebrospinal fluids (CSF) bacterial and viral cultures, polymerase chain reaction analysis for HSV and tuberculosis showed negative results. The diagnosis of anti-NMDAR encephalitis was made as anti-NMDAR antibodies were positive in both CSF and serum. She was started on plasma exchange and Methylprednisolone followed by Rituximab with episodic intravenous immunoglobulin (IVIG) therapy. Due to a high index of suspicion for teratoma, a pelvic CT scan was performed which showed a 5mm focal fatty lesion within the right ovary, suggestive of a mature teratoma. She underwent laparoscopic right salpingo-oophorectomy. Mature cystic teratoma was confirmed on histological examination. Despite tumour removal, there was no clinical improvement and further imaging failed to prove any evidence of teratoma elsewhere. Given the continuing deterioration in the patient's condition, left saplingo-oophorectomy was performed in expectation of preventing further disease progression. However, the histopathology did not show any teratoma and patient was continued on Cyclophosphamide.

Discussion: Early diagnosis and management with immunotherapy, chemotherapy, surgical resection and ICU support is a critical prognostic factor in anti-NMDAR encephalitis. 75% of patients achieve a full recovery or are left with mild deficits and in 25% of cases, severe residual deficits or death occurs.The literature remains controversial regarding oophorectomy, when no convincing imaging evidence exists, to increase the likelihood of identifying a microscopic teratoma. In our patient, despite early diagnosis and treatment including resection of teratoma, clinical recovery was not achieved. However, in refractory cases recovery may take 2 years or longer and the patient may not always return to their former levels of motor function and cognition. The association ovarian teratoma-anti-NMDAR encephalitis is a potentially fatal pathology occurring in young women. Heightened recognition and diagnosis through confirmation of anti-NMDAR antibodies, appropriate imaging and subsequent tumor removal must be emphasized among gynecologists.

Build it, and they *still* won't come: how to motivate gynaecology trainees to make the most of laparoscopic simulation training opportunities

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Gynaecology trainees worldwide find it increasingly difficult to gain the operative experience needed to develop basic and advanced laparoscopic skills. Meanwhile, more and more operations can be performed laparoscopically, and the laparoscopic approach is becoming the gold standard for several 'bread and butter' gynaecological operations: laparoscopic salpingectomy for ectopic pregnancy, bilateral tubal ligation, laparoscopic myomectomy, and laparoscopic hysterectomy to name a few.

Because in *vivo* training opportunities are increasingly hard to come by, surgical educators must become more innovative in our training techniques and approaches.

There is growing evidence of the construct validity of laparoscopic simulator training: it has been shown to translate well to *in vivo* operative skills and techniques. The missing link in the chain is how to actually motivate trainees to make the most of the laparoscopic simulation training opportunities available to them. (There is good evidence that relying on trainees' internal motivation is insufficient.)

It is likely that mandatory laparoscopic simulator training will be introduced across Australia and New Zealand in future, so that trainees and trainers alike can use operative time to develop skills and techniques that cannot be learnt in a simulated setting.

I will outline approaches that can be taken to improve trainees' motivation to undertake laparoscopic simulation training, including: inter-specialty competitions (eg. gynaecology vs. general surgery trainees); a structured curriculum of 'box set' laparoscopic training; and proficiency-based simulator training becoming mandatory, prior to being allowed to operate on an actual patient. I will also outline the educational theories behind such approaches, and how they could be implemented locally.

Recurrent bilateral mature teratomas with gliomatosis peritonei in pregnancy

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Introduction

Gliomatosis peritonei is characterised by implantation of mature glial tissue within the peritoneal cavity. It is a rare condition almost exclusively associated with immature ovarian teratoma. We report a case of gliomatosis peritonei associated with recurrent bilateral mature teratomas diagnosed in pregnancy.

Clinical Description

A 28 year old G1P0, who had a history of laparotomy for a 2kg mature teratoma, was incidentally noted to have a 9x4cm complex right adnexal mass and enlarged left ovary on dating ultrasound at 7/40. The right multiloculated cystic mass with solid areas enlarged rapidly over four weeks to a size of 17x5x12cm. The left ovarian cyst remained stable at 3.9x3x3.9cm in size. At 16/40, she underwent a laparoscopy which was converted to laparotomy due to dense bowel adhesions. At laparotomy there was a 4cm left ovarian cyst and a 17cm complex right ovarian cyst with no ovarian tissue. Small white deposits on the bowel serosa and omentum was noted. A right salpingo-oophorectomy, left ovarian cystectomy and omental biopsy was performed. Histopathology demonstrated bilateral mature teratomas and gliomatosis peritonei.

Her pregnancy continued without complications until 33/40 when she developed cholestasis of pregnancy. She underwent an induction of labour with prostaglandins at 37+2/40 and progressed to a spontaneous vaginal delivery of a 2865g female with Apgars 9, 9.

Discussion

Mature teratomas are the most common ovarian germ cell tumour occurring in young women. They are often slow-growing and recurrence is low (4.2%). However in women with large tumours diagnosed at a young age, such as in our case, the recurrence rate is significantly higher, at 21.4% (Harada et al.). This is a unique case in that the recurrence was bilateral, was diagnosed in pregnancy and was associated with gliomatosis peritonei, a rare complication of teratomas with most cases reported occurring with immature teratomas. The rapid growth of the tumour seen in the first trimester is also unusual and could be related to the increased levels of estrogen and progesterone in pregnancy.

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Endometriosis with recurrent massive ascites and pleural effusion: a rare clinical presentation

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Introduction

Endometriosis with ascites and pleural effusion is a rare presentation of a common gynecological disease. We present a case of a 30 year old female presenting with recurrent episodes of ascites requiring paracentesis.

Case Description and Operative Findings

A 30 year old nulliparous African female was referred with right upper quadrant pain, increasing abdominal girth, exertional dyspnea, and early satiety. Outpatient ultrasound revealed extensive ascites, left pleural effusion, and bulky cystic left

Past medical history included stage IV endometriosis, recurrent ascites, and sickle cell trait. The patient had undergone an unconfirmed number of laparoscopies in Ghana for treatment of endometriosis. After exclusion of other causes of ascites, the patient's recurrent episodes had been deemed due to endometriosis, and in the past three years had been effectively managed with regular goserelin injections.

On examination, the patient had distended abdomen with shifting dullness and hyper resonant flanks. Decreased air entry and percussion dullness at the base of both lungs was noted. CA 125 and CA 19-9 were mildly elevated at 46 and 52 respectively

An intraperitoneal drain was inserted under ultrasound guidance. A total of 2200mL of blood stained fluid was drained. Microscopy of the fluid revealed presence of leucocytes. Cultures were negative, and cytology and cell block were negative for malignancy.

Repeat ultrasound demonstrated a haemorrhagic left ovarian cyst, a small right endometrioma, pelvic organ tethering, and significant ascites in the pelvis and upper abdomen with the appearance of blood.

After recommencing Zoladex the patient was discharged with follow up in the outpatient clinic. The patient was consented for diagnostic laparoscopy and treatment of endometriosis. Laparoscopy revealed 1500 mL of bloody ascites, extensive abdominal and pelvic adhesions, and widespread superficial peritoneal endometriosis over the bladder, pelvic structures

and the anterior abdominal wall. Extensive adhesiolysis, radical excision of all endometriosis, and chromotubation were performed. Repeat cytology of the ascitic fluid identified foamy macrophages and haemosiderophages and was negative for malignancy.istopathological examination of all excised specimens confirmed endometriosis.

The patient's postoperative course was uneventful. The patient was discharged with planned follow up in the outpatient clinic and ongoing goserelin injections.

Discussion and Conclusion

Endometriosis associated with ascites and pleural effusion is a rare presentation of this complex disease. A total of 63 case of endometriosis related ascites were reported between 1950 and 2010. [1] The pathophysiology of the development of ascites in the setting of endometriosis is not well understood.

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Beta HCG levels and Mean Sac Diameter Can Predict Conversion to Surgical Management of Cesarean Scar Ectopic Pregnancies

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Background: Caesarean Scar Ectopic Pregnancy (CSP) is a rare and potentially life threatening form of ectopic pregnancies. Multiple treatment modalities were suggested, however, up to date there are no guidelines for management of CSP.

Aim: To describe the incidence, management, complications of treatment and define risk factors for conversion from medical to surgical treatment of CSP in a large tertiary center in Victoria, Australia.

Methods: A retrospective analysis of all CSP that occurred between 2008 and 2016 at The Royal Women's Hospital, Melbourne, Australia was performed. The cohort was divided according to management; demographic, clinical and sonographic data were collected. Rates of conversion were compared between groups and risk factors necessitating conversion were sought.

Results: Forty-six cases of CSP were identified. Incidence of CSP has increased from 0.05% to 0.09% of all deliveries. A regression model for absolute numbers of CSP predicted an additional 0.47 CSP each year (p=0.03). The most common treatment modalities were systemic treatment with methotrexate (28.2%) and ultrasound-guided intra-sac injection of KCL with systemic treatment of methotrexate (58.7%). β-hCG levels (IU/L) at presentation were 42,189 and 19,729 for cases who were and were not converted, respectively (p=0.04). Only 6.3% of patients with β-hCG at presentation below 10,000 IU were converted from medical to surgical management. Mean Sac Diameter (MSD) of cases who were converted was 11.2 mm larger than in cases who were not converted (p<0.001). None of the patients with an MSD below 10mm or a trophoblastic mass below 20mm^3 were converted to surgical management. There was no significant association between foetal cardiac activity and conversion from medical to surgical management.

Conclusions: CSP emerges as an important phenomenon in modern obstetrics and gynaecology and it appears that its frequency is on the rise. The preferred method of treatment is yet to be known, however, it is possible that a large MSD and trophoblastic mass, alongside markedly increased levels of β-hCG at presentation should prompt surgical treatment.

The MiniArc Sling System for Female Stress Urinary Incontinence – 2-year outcomes

Joella Ang, How Chuan Han

Objectives

The MiniArc sling system has been used to treat female stress urinary incontinence (SUI) in our hospital since July 2014. It is comparatively less invasive and has been reported to reduce the risk of complications such as bladder perforation, injuries to structures in the true pelvis and groin pain. Placement techniques of the sling varied between institutions without a consensus as to the best method of placement. This was until the IUGA Conference in June 2015 where a 4-step technique was introduced by Astora Women's Health (AWH). Outcome data for this new technique is still scarce. We report our experience and 2-year outcomes.

Methods

Forty-one patients underwent a MiniArc sling system surgery in our hospital from 18 June to 30 November 2015 by a single operator using the 4-step technique from AWH. This involves advancing the trocar tip into the endopelvic fascia, rotating the tip 45 degree aiming for the superior medial aspect of the obturator foramen and penetrating into the obturator internus muscle to ensure a tighter hold and better tension. Case notes were reviewed to assess the demographics, preoperative urodynamic evaluation, operative details, complications and outcomes.

Results

Mean age and parity of the 41 patients were 59.5±8.3 years and 2.9±1.4 children respectively. 73.2% patients were postmenopausal. Pre-operative urodynamic studies showed mean urodynamic stress incontinence of 26.2g±50.1. Mean duration and estimated blood loss were 23.4 minutes and 3.4ml respectively. Intraoperative bladder perforation rate was 7.3% (n=3/41), of which one patient had failed MiniArc sling insertion and was converted to TVT-abbrevo insertion. Postoperative complication rate was 9.8% with two patients having superficial wound infection related to concomitant abdominal surgery and two patients who failed trial-off-catheter for a total of 12 and 19 days each. Rate of voiding difficulties more than 7 days was 22%. 32 patients came back for 2 years post-surgery while 5 are due for their follow-up appointment next month. 4 patients were lost to follow-up. Cure rate at 2 years was 96.9%. Rates of mesh extrusion (out to vaginal wall) and dyspareunia were 3.1% (n=1/32) and 3.1% (n=1/32) respectively.

Conclusion

Our experience shows that the MiniArc sling system surgery is a safe and effective treatment for female SUI with a high 2-year cure rate of 96.9%. Rates of mesh extrusion and dyspareunia were low in our population. While there were cases of intraoperative and postoperative complications, no long term adverse outcomes arose from them.

Prolapse Management: From the Top or the Bottom? *Recurrence of pelvic organ prolapse at 12 months following vaginal or laparoscopic hysterectomy*

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Background

Traditional management for symptomatic uterine prolapse has been vaginal hysterectomy. Recent years have seen an increase in the popularity of total laparoscopic hysterectomy. This retrospective observational study compared the rate of recurrent prolapse in women undergoing laparoscopic versus vaginal hysterectomy.

Method

Women undergoing vaginal or laparoscopic hysterectomy for symptomatic prolapse during 2016 were included in the study. Cases were recruited from a public gynaecology department and a private gynaecology practice. Electronic patient records for all women included in the study were reviewed. The primary outcome assessed was repeat surgery for prolapse. Referrals and reviews for prolapse and complications from the initial hysterectomy were also assessed. Notes were reviewed for a minimum of 12 months following hysterectomy.

Results

51 women had vaginal hysterectomy compared to 45 laparoscopic hysterectomy.

There was no difference in the rate of representation with symptomatic prolapse in each group. 17.6% (9/51) represented with symptomatic prolapse in the vaginal hysterectomy group vs 17.7% (8/45) in the laparoscopic group.

In the laparoscopic group the rate of recurrent surgery for apical prolapse was 4.4% (2/45) compared to 5.9% (3/51) in the vaginal group.

The rate of recurrent surgery for anterior compartment prolapse was 4.4% (2/45) in the laparoscopic group vs 3.9% (2/51) in the vaginal group and 2.2% (1/45) vs 3.9% (2/51) for posterior compartment prolapse respectively.

Complication rate was higher in the laparoscopic group with 38% (17/45) experiencing a complication, 9% (4/45) major. This compared to a complication rate of 14% (7/51) in the vaginal group, 4% (2/51) major.

Discussion

Mode of hysterectomy does not appear to alter the recurrence rate of pelvic organ prolapse. The rate of recurrent apical and posterior compartment prolapse was less in the laparoscopic group however the rate of recurrent anterior compartment prolapse was marginally higher. Due to the retrospective nature of this study it was not possible to compare the baseline demographics and presentation of prolapse in the two groups. An objective measure of prolapse prior to hysterectomy and at follow up would provide further information.

The higher complication rate reported in the laparoscopic group could be due to higher reporting rates from the women treated by a private gynaecologist compared to women treated in the public hospital, who primarily receive follow up from their GP.

Further investigation is required with a large, prospective study including an objective measure of prolapse.

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A Novel Technique for Management of Ureteric Injury

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Introduction

Ureteric injuries, when recognised post-operatively, may involve returning to theatre for laparotomy and ureteric re-implantation surgery. The following case describes the management of ureteric injury through the use of minimally invasive techniques.

Clinical description

A 48-year-old woman presented with severe menorrhagia on the background of a multi-fibroid uterus. She had been admitted on numerous occasions for severe anaemia which required repeated blood transfusions, and her menorrhagia was refractory to medical management. An urgent total abdominal hysterectomy and bilateral salpingectomy was performed. She recovered well initially but was noted to have a rising creatinine post operatively. A CT scan of the urinary tract showed a right-sided ureteric obstruction. Multidisciplinary management involved consultation with the Urology team and insertion of a percutaneous nephrostomy tube by Interventional Radiology. However, anterograde guide-wire insertion for stenting was unsuccessful. She was subsequently discharged home and returned the following week for cysto-ureteroscopy and retrograde pyelogram. Intra-operatively the ureteric obstruction was found to be secondary to a suture, which was treated ureteroscopically with laser to relieve the obstruction and allow stent insertion. She recovered well from the procedure and was discharged home. Follow up plan was for nephrostogram in four weeks and for cystoscopy and right ureteric stent exchange in three months.

Discussion

Ureteric injuries can occur in up to 10% of pelvic surgeries. In hysterectomies, rates of up to 5% have been described, depending on the route of surgery. The usual method of repair for ureteric injury is through ureteric reimplantation if discovered intra-operatively. When discovered in the post-operative period, it can be managed via stenting or reimplantation. Endo-ureteric repair of iatrogenic injuries has not been widely described in the literature. Through the use of a minimally invasive approach, the overall morbidity to the patient can be reduced.

Conclusion

Ureteric injury can be successfully managed via a minimally invasive approach. While the method described had significant benefits for this patient, further research is required to better evaluate the feasibility of such a technique as standard management.

Laparoscopic Management of Bilateral Brenner Tumour of the Ovary: A Case Report

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Introduction

Brenner tumour is a rare ovarian surface epithelial tumour. It is usually asymptomatic and often discovered incidentally. The following is a case of benign bilateral Brenner tumour of ovary presenting acutely and treated laparoscopically.

Clinical description

A 45 year old woman presented with acute abdominal pain. A CT scan of her abdomen and pelvis demonstrated bilateral complex, predominantly solid ovarian masses, 15cm diameter on the right and 7cm diameter on the left, with no ascites, abdomino-pelvic lymphadenopathy or omental or peritoneal lesions. Pelvic ultrasound scan confirmed the findings and suggested torsion of the right ovarian mass. Ovarian tumour markers were normal. After consultation with the Gynaecological Oncology team, she was taken to theatre for a laparoscopic bilateral salpingo-oophorectomy. Intraoperatively, the larger, right ovarian mass was found to be torted 360 degrees. It was de-torted and salpingo-oophorectomy was performed. The mass was retrieved with a bag and morcellated manually at the extended umbilical port site within the bag. Frozen section revealed a benign Brenner tumour. Left salpingo-oophorectomy was subsequently

performed and retrieved in a similar manner. The patient recovered well post-operatively and was discharged home on Day 2. The final histopathology confirmed bilateral benign Brenner tumour, with an associated right mucinous cystadenoma.

Discussion

Brenner tumour of the ovary is a rare neoplasm, accounting for 1.4-2.5% of all ovarian tumours. It usually occurs in post-menopausal women. Most cases of Brenner tumour are benign and less than 5% are proliferative or borderline, and association with other tumours such as benign serous or mucinous cystadenoma is not uncommon. Due to the large size of this patient's masses and their complex ultrasound appearances, she was initially considered for midline laparotomy for bilateral salpingo-oophorectomy with frozen section. However, due to multiple co-morbidities (elevated BMI, ischaemic heart disease) and the inability to cease her aspirin due to relatively recent coronary arterial stenting, a laparoscopic approach was employed. Fortunately, the procedure was able to be carried out entirely laparoscopically, with the main difficulty being the need to morcellate the mass within a bag in order to remove from the abdomen.

Conclusion

Although rare, Brenner tumour should be considered in large, well circumscribed complex ovarian masses with a predominantly solid component. Such tumours can be treated effectively via a laparoscopic approach, but consideration needs to be given to safe methods of specimen retrieval in order to prevent dissemination of neoplasm.

A case of a concealed deep endometriotic nodule causing persistent pelvic pain despite multiple previous surgeries to treat endometriosis

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The patient was a 43yo gravida 2 who had a longstanding history of dysmenorrhoea, dyspareunia and cyclical bowel symptoms. She had a past history of 5 previous surgeries for treatment of endometriosis including most recently a laparotomy, excision of endometriosis (including significant Pouch of Douglas disease) and insertion of Mirena in 2010 by a gynae-oncologist. After brief relief , she sought further opinion due to the impact of debilitating pain and bowel symptoms on her quality of life.

Despite normal pelvic ultrasound report and normal colonoscopy , when clinical examination demonstrated right uterosacral ligament thickening, tenderness in the Pouch of Douglas and nodularity on the anterior rectal wall, she was suspected to have deep infiltrative endometriosis. After thorough pre-operative counselling including review by a colorectal surgeon, the patient chose to undergo laparoscopic hysterectomy and excision of endometriosis.

Aim: This video presentation highlights:

- The importance of thorough clinical history and physical examination
- The limitations of imaging in pre-operative assessment of deep endometriosis
- The critical knowledge of sup-peritoneal pelvic anatomy for detection of deep endometriosis
- Systematic surgical techniques for excision of severe deep endometriosis
- In particular, how to remove pelvic sidewall endometriosis lying close to the obturator nerve and vessels.

Interstitial Ectopic Pregnancy: A Laparoscopic Approach

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Interstitial ectopic pregnancies are rare, representing 1-3% of all ectopic pregnancies[1,2]. Traditionally these have been managed with either local or systemic methotrexate alone or in combination with intrasac potassium chloride[3].

We describe the case of a 31yo g2p0 who presented with a spontaneous pregnancy at 4^{+3} gestation to the emergency department with right iliac fossae and suprapubic pain and 4 weeks of vaginal bleeding. bHCG was 23381 IU/L, serial transvaginal ultrasounds demonstrated a right interstitial ectopic pregnancy, with 32 x 30 x 26mm inhomogeneous conglomerate in the right cornua, covered by myometrium anteriorly and cranially with serosal bulging seen posteriorly and caudally.

We present the video demonstrating laparoscopic resection of interstitial ectopic pregnancy using laparoscopic injection of vasopressin into the uterus and the pregnancy itself, followed by resection of the ectopic pregnancy with a harmonic blade scalpel.

Subsequent imaging and bHCG have shown resolution of the pregnancy.

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Laparoscopic hysterectomy complications: lessons learnt

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Background

Hysterectomy is one of the most common gynecologic surgical procedures worldwide (1). Rates of total laparoscopic hysterectomy (TLH) in Australia have increased in recent years and now surpass the abdominal and vaginal surgical approaches (2). We performed a retrospective cohort study of 2013 patients who underwent TLH was performed in a tertiary care setting in WA to investigate peri-operative complications.

Aim

To present a descriptive review of complications identifying potential contributing factors.

Methods

A retrospective analysis of all patients undergoing elective TLH at St John of God Subiaco Hospital, Perth, WA between 2011 and 2016. Data were extracted from medical records. Patients were allocated to one of three groups of surgeons: general gynaecologists (615 cases), AGES trained gynaecologic endoscopists (167 cases) and subspecialists (1231 cases). Complications were analysed by surgeon group, time in specialist practice and surgical case volume.

The primary outcome was any major intraoperative complication. Secondary outcomes were postoperative complications and hospital readmission. Individual case reviews were performed for each complication.

Results

There were 36 intraoperative complications (1.8%), 45 post-operative complications (2.2%)

74 patients were readmitted to hospital (3.7%) within 42 days post surgery. The most common intra-operative complication was cystotomy (n=11, 0.55%) Â TLH was performed by general gynaecologists in 8 of the11 patients (72.7%) who sustained a bladder injury. . Nine of 11 patients (81.8%) had undergone previous abdominal surgery. Additional intra-operative complications included: ureteric injury (n=2, 0.1%), vascular injury (n=9, 0.45%),enterotomy (n=6, 0.30%) and bowel serosal injury (n=8, 0.40%). Conversion to laparotomy occurred in 25 cases (1.2%). Ten of these were intended and anticipated pre-operatively due to large uterine size. No significant differences were observed in post-operative complications between surgeon groups (p = .078). AGES endoscopists and subspecialists had fewer patients readmitted to vs. general gynaecologists: 32/615 (5.2%) general gynaecologists, 3/167 (1.8%) AGES endoscopists, 39/1231 (3.2%) subspecialists (p = .043). Time in specialist practice was not associated with intraoperative complications (p = .629) but surgeons who performed >100 TLHs during the study period had fewer intra-operative complications compared to those who performed <100 TLHs (p = .032).

Summary

The incidence of any major intraoperative complication was significantly higher amongst general gynaecologists compared to subspecialists (3.3% vs. 1.1%; p=.002). Â Cystotomy was the most common intra-operative complication. Previous abdominal surgery was a risk factor for cystotomy and TLH performed by subspecialists vs. general gynaecologists was associated with a reduced incidence of cystotomy.

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Adnexal abscess: tubo-ovarian or appendiceal in origin?

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Background:

When investigating and managing a female patient with a possible right sided pelvic abscess, one should always consider that both adnexal structures (fallopian tube and ovary), ureter and the appendix may be involved.

Discussion:

Complex adnexal masses present a diagnostic challenge at ultrasound and it may be impossible to identify which structures are involved. We present a case, with ultrasound images and video of laparoscopy, of a 42 year-old woman with a right sided adnexal mass. She presented with symptoms and signs consistent with both pelvic inflammatory disease and appendicitis. Ultrasound suggested a possible dermoid cyst. Laparoscopy, however, demonstrated a complex right sided pelvic abscess involving both adnexal structures, with the ureter adherent to them and to the appendix. An appendicectomy and right sided salpingo-oophorectomy were performed along with ureterolysis. On histopathology a periappendiceal abscess and acute salpingitis were shown with an aspirate growing mixed anaerobes and *Streptococcus constellatus.*

Conclusion:

This case reminds us that when a patient with a complex right sided adnexal mass and symptoms consistent with infection is surgically managed in an acute setting, careful dissection of the sidewall and ureterolysis should be performed, or one skilled to do so should be called upon to do it. One should also maintain a high suspicion for bowel pathology.

Lateral thinking: management of vaginal sulcus perforation with a transobturator sling

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Stress urinary incontinence is a common problem for many women, with a lifetime incidence as great as 50%, and with a significant detrimental effect on their quality of life. Mid-urethral slings are recognised as the gold standard and minimally invasive surgical treatment for stress urinary incontinence. Meta-analysis has shown that both retropubic and transobturator approaches have similar rates of cure in the short and medium term. The retropubic route has a higher rate of overall surgical morbidity, including major visceral and vascular injury and post-operative voiding dysfunction, however it is recognised that the transobturator approach has a higher rate of vaginal perforation. Complications of mid-urethral sling surgery are generally under-reported in the literature, and just as reports on the incidence of vaginal sulcus perforation and mesh exposure vary, so to do the recommendations for the management of these complications.

This oral case presentation will discuss the management of a 48 year old woman with urodynamic proven stress incontinence who was found to have perforation of the lateral vaginal sulcus at the time of her transobturator mid-urethral sling surgery, along with a review of literature regarding the management options for lateral vaginal mesh exposure following mid-urethral sling surgery.

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Operative management of rectovaginal endometriosis at a large tertiary referral unit.

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1. Monash Health, Melbourne

2. St Vincent's Hospital, Melbourne

Deeply infiltrating endometriosis (DIE) is a debilitating condition that can have profound impacts on reproductive health and quality of life.

We describe the standard preoperative and operative approach to the management of a large rectovaginal endometriotic nodule in a large urban tertiary referral unit.

All patients with suspected DIE undergo an endometriosis pelvic ultrasound after bowel preparation. This is performed by a gynaecologist with sub-specialist qualifications in gynaecological ultrasound. This maximises the ability to detect DIE, in particular the amount and degree of bowel involvement. We do not routinely perform a planning laparoscopy.

A multi-disciplinary approach is crucial to the management of patients with endometriosis affecting the large bowel. Patients are counselled extensively preoperatively, both by the operating gynaecologist and a colo-rectal surgeon with a dedicated interest in endometriosis. A preoperative colonoscopy is only performed in the presence of suspicious symptoms, which is rare. Full bowel preparation is required preoperatively. Lastly, patients with lesions greater than 3cm undergo a CT and IVP to out rule ureteric involvement.

A joint laparoscopic approach by a gynaecologist and a colo-rectal surgeon is the standard approach in our unit. We will present a video outlining our unit's approach to dissection of the rectovaginal septum and excision of a full thickness vaginal nodule.

Severe prolonged chemical peritonitis caused by intra-operative rupture of a dermoid cyst during a laparoscopic ovarian cystectomy: a case report

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Introduction: Dermoid cysts or mature cystic teratomas of the ovary are the most common form of germ cell tumours accounting for 20-25% of all ovarian masses. Laparoscopic surgery is widely accepted as gold standard treatment for benign ovarian masses, including dermoid cysts. Spillage of cyst contents during laparoscopic ovarian cystectomy is significantly higher when compared to an open approach. Chemical peritonitis is a rare complication due to the spillage of dermoid cyst contents in to the abdomen with a reported incidence of 0.2%.

Case: A 24 year old underwent an elective laparoscopic dermoid cystectomy for management of a symptomatic 10cm right ovarian dermoid cyst. There was rupture of the cyst at the time of surgery and >4Litres of normal saline was used to irrigate the abdominal and pelvic cavity. She presented 9 days following her surgery with severe abdominal pain and the clinical assessment was consistent with severe post operative sepsis and peritonitis. A CT scan was suggestive of a probable pelvic collection and she underwent an emergency laparoscopy and washout of the abdomen and pelvis following initial management of sepsis. The peritonitis was initially presumed to be bacterial in nature, however overtime the diagnosis was more in fitting with a chemical peritonitis. She had an initial 42 day hospital re-admission followed by multiple representations with abdominal pain and recurrent need for drainage of intra-abdominal collections with repeated surgery as well as drainage under radiological guidance. The requirement for repeated drainage is on-going to date, now 9 months following the initial laparoscopic management of the dermoid cyst.

Conclusion: Spillage of cyst contents during laparoscopic ovarian cystectomy cannot always be avoided. Laparotomy may be considered as the preferred approach for larger dermoid cysts to avoid the risk of chemical peritonitis.

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Laparoscopic Treatment of Residual Ovary Syndrome.

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Background: Residual Ovary Syndrome (ROS) is the presence of pelvic pain associated with the deliberate retention of one or both ovaries at the time of hysterectomy[1]. With a reported frequency of 0.9-4.9%[2], ROS is a common condition with few conservative options for management. Surgery to treat ROS is technically challenging owing to complex surgical history, adhesions and co-morbidities such as endometriosis[3] and there is currently limited research to guide practice.

Objective: To describe our experience in laparoscopic treatment of ROS, assess the outcome of reported pain at follow up, the risk of surgical complications and ascertain if there were any factors contributing to these outcomes.

Methods: Retrospective analysis of patients undertaking laparoscopic oophorectomy to treat ROS at the Royal Women's Hospital Gynaecology 2 Unit between January 2008 – May 2017. Patient information was extracted from medical records including demographics, co-morbidities, surgical history and initial imaging performed. We then collected detailed surgical information including level of adhesions, length of stay and complications. Finally histopathology and follow up regarding pain symptoms were recorded.

Results: Ninety-nine patients were included in the analysis with a mean age of 48.9 and average BMI of 28.1. Average operative time was 1 hour and 51 mins and mean length of stay was 1.96 days. There were six major operative complications (6.1%) and two cases required conversion to laparotomy for better access (2%). There were 7 post-operative complications (7.1%). Factors associated with greater risk of complications included high BMI and severe adhesions reported by surgeons.

At follow up, 9% reported persistent pain symptoms, 25% stated their pain had improved but was still present. Factors associated significantly with persistent pain symptoms at follow up were younger age and a history of gastrointestinal illness.No other factors, including a history of endometriosis, were found to be associated with pain at follow up or complications.

Conclusions: Laparoscopic treatment of ROS is challenging, yet may offer improvement in pain symptoms. Groups less likely to show pain improvement are younger women or those with a history of gastro-intestinal illnesses. Patients should be counselled about the significant risk of complications particularly when they have a raised BMI or multiple previous operations, and the operation should be performed by an experienced advanced laparoscopic surgeon.

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Leiomyomas And The Decision To Power Morcellate

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Introduction

Minimally invasive procedures in the treatment of symptomatic leiomyomas procure numerous benefits including avoidance of hysterectomy in those women wanting to preserve fertility. The use of power morcellation during these procedures is currently discouraged due to the potential risk of dissemination of malignant or even benign tissue [1].

Clinical description

Ms GT, 43 years old, G1P1, presented with uterine bleeding and a solid abdominal wall lesion, shown to be fibroid tissue on core biopsy. This is on background of aggressive leiomyomatous disease and a number of myomectomies over 11 years, including a laparoscopic myomectomy with morcellation in 2012. Multi-modal imaging demonstrated fibroid uterus and soft tissue masses in the pelvis and right anterior abdominal wall. Ultrasound pelvis revealed left adnexal mass not separately identified from left ovary. Tumour markers produced an increased Risk of Ovarian Malignancy Algorithm (ROMA) result. Ms GT underwent a laparotomy, total abdominal hysterectomy, bilateral salpingo-oophorectomy, removal of multiple pelvic and anterior abdominal wall nodule, omentectomy and appendicectomy. Histopathology revealed multiple uterine and extra-uterine leiomyomas, with no evidence of malignancy. Histopathological impression was multiple

parasitic leiomyomas potentially secondary to previous morcellation. Cytology of peritoneal washings showed no malignant cells.

Discussion

Leiomyomas are the most common pelvic neoplasm in women and despite having the potential to cause a number of symptoms[1] are thankfully benign. Minimally invasive procedures have revolutionised the treatment of leiomyomas, however, in 2014, the American Food and Drug Administration released a warning discouraging the use of power morcellation during hysterectomy or myomectomy for uterine fibroids[1]. This warning is based on the potential for morcellation to disseminate both malignant or even benign tissue[1]. Currently, there is no reliable diagnostic technique to distinguish women with malignant masses from those presenting with benign uterine masses and as such, the risk of inadvertently spreading previously unknown malignant tissue should always be considered[3]. With this knowledge, power morcellation should only be engaged following careful patient selection and thorough discussion with patients regarding the risks and benefits of this procedure[2].

Conclusion

Uterine leiomyomas are common benign masses which can be clinically difficult to distinguish from their rarer malignant counterparts[3]. Power morcellation during myomectomy or hysterectomy allows for greater practice of minimally invasive techniques[2], however potentially increases the risk of tissue dissemination [1]. This risk needs to be considered by both practitioners and patients prior to the decision to use this surgical technique[2].

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Jelly-belly

Siew Pei Goh[1], Shveta Kapoor[1]

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Objective

To discuss a case of appendiceal cancer presenting as ovarian cyst rupture.

Case Report

A 31 year old nulliparous female was referred by her GP with a one day history of severe lower abdominal pain and profuse vomiting. A formal Pelvic USS showed an 8.5cm left ovarian cyst and large amount of particulate free fluid in the pelvis thought to be a ruptured ovarian cyst. She underwent an emergency diagnostic laparoscopy which revealed large straw coloured fluid in the abdomen, two large green gelatinous masses over the appendix and the right ovary which was also torted; There was also extensive mucinous deposits over the parietal peritoneum, the abdominal wall and the right diaphragm. An appendicectomy and detorsion of the ovary was performed while the mucinous material was left in situ. Tumour markers returned as normal and histo-cytology showed a low grade appendiceal mucinous neoplasm and pseudomyxoma peritonei. (PMP). A staging CT showed ascites in the abdomen and pelvis with no pulmonary metastasis. The patient has recently undergone cytoreductive surgery(CRS) which includes radical hysterectomy, oophorectomy, right hemicolectomy and anterior resection of the rectum, splenectomy, diaphragm excision, cholecystectomy as well as Hyperthermic Intraperitoneal Chemotherapy(HIPEC). The patient was admitted to intensive care unit for two days and was subsequently discharged with appropriate vaccinations and prophylactic antibiotics, follow up from stoma care nurse and endocrinologist for commencement of hormonal replacement therapy.

Discussion

Pseudomyxoma Peritonei (PMP) is a clinical syndrome secondary to intraperitoneal accumulation of a gelatinous ascites from rupture of a mucinous tumour, most commonly appendiceal cancer. The incidence is approximately 2 in 10,000 laparotomies and the aetiology remains unknown. Patients affected are most commonly asymptomatic. Symptoms when present include non-tender increasing abdominal girth, palpation of ovarian mass during an internal examination and intestinal obstruction which is a late sign. CT may show heterogenous material with scalloping of the liver, spleen and mesentery; thickened undersurface of the diaphragm, and relative sparing and central displacement of the small bowel and mesentery. Prognosis depends on tumour biology, stage of disease and response to treatment with a median survival after surgery of 5.9-6.25 years. Swanson et al 2016 reports improved survival with HIPEC in addition to CRS to 59-81% at 5 years, 49-70% at ten years.

Recommendations/Conclusions

The general gynaecologists should be prepared for unusual findings at diagnostic laparoscopies for abdominal pain and involve relevant specialties as needed.

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Case Series and Surgical Video Presentation: Combined Laparoscopic and Cystoscopic Partial Cystectomy for Excision of Deeply Infiltrating Bladder Endometriosis

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Introduction

Deeply infiltrating endometriosis (DIE) is a highly invasive form of endometriosis which is defined arbitrarily as endometriosis infiltrating the peritoneum by more than 5mm. When this disease affects the bladder, the endometriotic lesion infiltrates the detrusor muscle to partial or full thickness. When medical therapy for such a lesion is declined or fails, surgical excision is the most effective management option.

We present a case series and surgical video of a combined laparoscopic and cystoscopic excision of deeply infiltrating endometriosis of the bladder.

Methods

A case series of all patients undergoing combined laparoscopic and cystoscopic excision of bladder DIE in a single tertiary centre over a 5-year period. Information documented included patient demographic data, symptomatology, operative details, length of admission and intra- and post-operative complications.

A representative surgical video was recorded of a patient undergoing combined laparoscopic and cystoscopic excision of an endometriotic bladder nodule.

Case Description:Surgical Video

A 36 year-old, P0 presented with a 12-month history of sudden onset cyclical dysuria and haematuria, on a background of longstanding dysmenorrhea.

Tertiary level transvaginal-ultrasound scan demonstrated adenomyosis, tethered ovaries, and a 25mm endometriotic bladder nodule extending through the bladder wall. Concurrent MRI demonstrated a 25mm heterogeneous mass postero-superiorly within the urinary bladder. The upper renal tracts were normal.

The patient declined medical management and elected to undergo surgical management as first line therapy. Following detailed consent, she underwent combined laparoscopic and cystoscopic excision of the bladder nodule. A urologist

outlined the lesion cystoscopically and the gynaecologist excised it laparoscopically and then sutured the defect laparoscopically. The procedure and post-operative course were uneventful. On post-operative review at 8 weeks, the patient described complete resolution of urinary symptoms. Histopathological analysis of the excised specimen confirmed endometriosis.

[A surgical video demonstrating the procedure will be embedded into the final presentation, along with a detailed discussion of the method used].

Results

Six patients underwent combined laparoscopic and cystoscopic excision of deeply infiltrating bladder endometriosis during the study period. All patients underwent pre-operative tertiary-level pelvic ultrasound scan and MRI, and imaging findings correlated closely with intra-operative findings. Average length of post-operative stay was 3 days. There were no intra operative complications and 4 post-operative complications, all urinary tract infections. All patients described complete resolution of urinary symptoms at post-operative review.

Conclusion

We conclude that laparoscopic and cystoscopic partial cystectomy for excision of deeply infiltrating bladder endometriosis is a safe and feasible procedure within our institution.

The Cumulative Success of Ovulation Induction Therapy with Gonadotrophins in Therapy Naïve Anovulatory Women?

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Aim:

To determine the cumulative pregnancy rate, multiple pregnancy rate, incidence of cancelled cycles and incidence of ovarian hyper-stimulation syndrome (OHSS) for therapy naive women undergoing ovulation induction (OI) with gonadotrophins.

Method:

A retrospective analysis of therapy naive patients undergoing OI with gonadotrophins was performed over a 3 year period across 2 fertility centres. Patients with oligo- or anovulation underwent OI with follicle stimulating hormone (FSH) or FSH and luteinising hormone (LH) if required, via low dose step-up protocol. Pelvic ultrasound, serum estradiol and LH measurements were used for follicle tracking. Pregnancy was diagnosed with serum hCG measurement at 14 days and clinical pregnancy confirmed with pelvic ultrasound.

Demographic data including parity, age, BMI, AMH and partner's age and BMI were recorded. Number of cycles, dose of FSH, number of increases of doses and final dose was recorded for each cycle. The outcome of each cycle, reason for cancellation if cancelled, and incidence of multiple pregnancy or OHSS was recorded.

Results:

268 patients underwent 591 cycles of OI during the study period. Mean number of cycles per patient was 2.2 (min =1, max=7). 85 cycles were cancelled, a rate of 14.3% of all cycles; the reasons for cancellation were; too many follicles (42% of cancelled cycles), no response (31%), missed ovulation (9%), patient away or partner away.

The pregnancy rate per cycle was 22% for cycle 1 (42% of the total clinical pregnancies), 17.8% for cycle 2 (33.8% of the total clinical pregnancies), 7.4% for cycle 3 (14% of the total clinical pregnancies), with a pregnancy rate of below 2.5% for each cycle thereafter.

Indicators for success included normal range BMI, higher AMH and younger age of patient. These findings were significant for age (under 35) and BMI (under 25), $p<0.05$.

136 patients had a clinical pregnancy, a rate of 51%. 94 off these resulted in a live birth, 26 were ongoing at time of reporting, 16 resulted in miscarriage and 1 was an ectopic pregnancy.

5 of the clinical pregnancies were multiple pregnancies, (all DCDA), a rate of 2% for all patients and 3.6% for all clinical pregnancies. No higher order pregnancies occurred.

No cases of OHSS were seen.

Conclusion:
OI with gonadotrophin therapy is a safe, effective option for therapy naive patients. It has a multiple pregnancy rate that compares very favourably with IVF, without the risk of OHSS. Rate of success drops substantially after 3 cycles.

Comparison between vaginal and laparoscopic sacrocolpopexy – clinical outcomes.

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Hypothesis

Sacrocolpopexy (SCP) is the operation of choice for apical vault prolapse (1). Initially described as an open abdominal procedure (2), followed by laparoscopic and robotic approaches with equal anatomical outcomes, but longer operating time (1). Further described is a combined approach (3). Based on this, it seemed logical to continue and explore the possibility of performing SCP exclusively trans-vaginally. The objective of the study is to present the technique of this new operation and compare it with laparoscopic SCP

materials and methods

Our retrospective cohort study compared surgery results of 25 patients who underwent vaginal sacrocolpopexy (VSCP) and 18 patients who underwent laparoscopic sacrocolpopexy (LSCP) for either post hysterectomy vault prolapse or at the same session of hysterectomy for prolapse. VSCP was performed as follows: after transversely incising the vaginal apex without opening the peritoneal cavity, the posterior peritoneum was bluntly dissected over the rectum, up to the sacrum. A 3*15 cm polypropylene mesh was sutured to the posterior vaginal wall leaving the excess length of the mesh proximally. The rectum was displaced to the left through the anus. The mesh was inverted into the dissected space, and attached to the anterior surface of the sacrum at the level of S3-5 under digital control with 2-3 endoscopic tackers (ProTack™ 5mm Fixation Device). Tension was gauged by leaving a 1st degree apical prolapse to avoid excess tension and back pain. Vaginal cuff was closed and additional correction of anterior wall\TOT were made as indicated.

Results

Demographic characteristics, clinical characteristics and concomitant hysterectomies were similar in both surgical approaches. More concomitant vaginal wall repairs was performed in VSCP group. The length of VSCP procedure was shorter than LSCP (104 min, 84 min respectively).

The immediate complications following VSCP were post-operative anemia in one woman treated with blood transfusion and rectal lacerations in two patients, which was identified and sutured during primary operation without further sequella. The immediate complications following LSCP were post-operative fever in one patient, which resolved by antibiotic treatment and ileus due to trocar site herniation in another patient witch was successfully treated by repeated laparoscopy by repositioning the bowel and suturing the hernia sac.

In a follow-up of eight months, the recurrence of prolapse, de-novo urgency and mesh erosions rate were similar in both groups.

Concluding message

We present a novel vaginal approach for sacrocolpopexy. Both LSCP and VSCP are safe and effective options for SCP.

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Is there a difference between Chlamydia Trachomatis\Neisseria Gonorrhoeae-positive and negative pelvic inflammatory disease? - A case control study

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Introduction

Pelvic inflammatory disease (PID) affects 8% of reproductive-age. However, these pathogens are only detected in a third of PID patients, raising the question whether CT/NG-positive-PIDs differ from CT/NG-negative-PIDs clinically. There is not enough data on the difference in clinical presentation and complications between PID with these sexual transmitted bacteria and PID caused by other organisms.

Our objective was to examine the characteristics of *CT and GC* infection in comparison with other types of microbial infection among women admitted to our department for Intravenous Antibiotic treatment for clinically diagnosed PID.

Materials & Methods

This retrospective, single-center cohort study compared CT\GC PID patients with non-CT\GC PID patients admitted to The Gynecology department between 2010 and 2016. All patients admitted for PID were taken vaginal, cervical and urinary culture and urine PCR for detection of CT and GC. A random control group of a 100 non-CT\GC PID patients was selected. Pain was measured by VAS scale

Results

A Group of 100 PID patients with positive PCR for CT\GC (83 patients were positive for CT; 17 patients were positive for GC) was identified. The control group included 23% Escherichia coli, 18% other gram-negative bacteria, 25% Streptococcus species, 17% staphylococcus species, 13% enterococcus and 4% other Gram-positive bacteria.

The patients in the study group were 4 years younger in average(p=0.0008), which may explain their lower gravidity and parity. Their BMI was higher(p=0.0001) and they had more cases of recurrent PIDs (0.0001). Their criteria for hospitalization was less likely to be Unresponsiveness to ambulatory antibiotics or admission following IUD insertion but more likely to be general poor condition. Pyosalpinxs was more frequent in the study group. However, there was no statistically significant difference in the number of patients undergoing surgery due to TOA. Days of hospitalization were the same between the groups (p=0.1589). Fever was more prevalent in the control group (58% vs. 34%, p=0.0010). There were no differences in other vital signs. Study group experienced higher pain levels during hospitalization (6.8±2.3 vs. 5.9±3.1, p=0.0207).

CRP was higher in the study group (5.5±5.5 vs. 1.9±4.0, p=0.0001) while no difference was found in WBC (p=0.4529).

Conclusions

Patients with PID who are CT/NG positive are **younger, have more recurrent PID, lower gravidity and parity.** These patients report more pain and are less likely to have normal US examination. **There is no difference in the need of surgery among the groups.**

Trophoblastic Tissue At Total Laparoscopic Hysterectomy ?!

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Objective: Rare case of patient with placental tissue on histology at caesarean scar site post total laparoscopic hysterectomy.

Patient: 37-year-old woman presented with eighteen months history of intermittent severe pelvic pain, dysmenorrhoea, and deep dyspareunia. Her complicated obstetrics history consists of three caesarean sections. The 1st was complicated by placental abruption. She was hospitalized during the 3rd pregnancy due to severe foetal growth restriction and found to have a uterine dehiscence at time of caesarean section. She had laparoscopic excision of endometriosis in 2006. There was no improvement of her symptoms with trial of Depo Provera and was experiencing breakthrough bleeding. She also experienced menstrual constipation and bloating. Ultrasound revealed two complex left adnexal cyst query

endometriomas. She had no desire for future fertility and decided for total laparoscopic hysterectomy, bilateral salpingectomy and left oophorectomy.

Procedure: Uterine length was 8cm. Biswas™ uterine manipulator and cup was inserted. On primary survey, the ovaries were normal. Cystic structure on bladder dome and left pelvic side wall was noted, query bladder endometrioma. Cystoscopy was performed to rule out bladder involvement, which revealed a normal bladder. Saline was used to keep bladder distended to identify the borders and bladder adhesions were dissected. Cystic structure over bladder dome and left pelvic side wall was dissected. PK Gyrus™ bipolar energy source and monopolar scissors were used to perform a total laparoscopic hysterectomy and bilateral salpingectomy. Both vaginal cuff angles were sutured to the uterosacral ligaments on either side using 1 Vicryl suture. 2.0 V-Loc™ 90 barbed suture was used to close the vault.

Post-Surgery: Patent was discharged home well. Histology revealed focally calcified transmural lesion within anterior lower segment/caesarean section site with intermediate trophoblastic cells in keeping with non-neoplastic placental site lesion. Post-surgery, patient had a negative beta-HCG.

Discussion: To our knowledge, there are no similar cases on literature review. In this case, the patient had a complicated caesarean section two years prior. This placental tissue could be from a previous undiagnosed placenta accrete, increta or percreta, and may have been the cause of the scar dehiscence in the third caesarean. Possibly, the lower segment was closed with still some adherent placental tissue left in situ. Interestingly, the patient did not have any abnormal uterine bleeding since the caesarean, but only progressively worsening endometriosis symptoms. Other differential diagnosis is chronic caesarean scar ectopic pregnancy. However, this patient has made full recovery and now asymptomatic.

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Pre-operative diagnosis of benign versus malignant uterine mass: Case report and review of available pre-operative investigations

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Background:

Uterine leiomyoma is the most common benign pelvic neoplasm in women.[1] In light of the considerable negative publicity received with tissue morcellation and subsequent spread of undiagnosed gynaecological malignancy, it has become increasingly important for clinicians to confidently determine the likelihood of malignant pathology preoperatively. [2,3] Currently, there is no single definitive investigation available pre-operatively to differentiate a benign uterine leiomyoma from a malignant uterine neoplasm.[3]

Case report:

This is a case of a 36-year -old nulliparous female who presented to emergency with a 3 day history of worsening abdominal pain. She reported a similar episode of pain 1 year ago, which led to a pelvic ultrasound demonstrating a large 13 x 9 x 8cm pedunculated fibroid arising from the uterus. The pain improved spontaneously and she did not have any further follow up. Clinical examination revealed a large firm mass up to the xiphisternum with tenderness over the mass. Bimanual examination revealed a fullness in the vaginal fornix with a grossly deviated normal appearing cervix. A pelvic ultrasound reveals a 21 x 17 x 11cm complex mass arising from the left pelvis with areas of cystic degeneration and internal vascularity which was atypical for an uncomplicated leiomyoma. The differential diagnosis included a rapidly growing pedunculated fibroid and or an ovarian fibroma. Subsequent germ cell tumour markers and Ca 125 were unremarkable. An MRI revealed a 23x19x9cm mass from the posterior wall of uterus with a 2.5cm area of restricted diffusion and features compatible with areas of cystic/necrotic changes where leiomyosarcoma was a diagnosis of exclusion. After a multidisciplinary discussion with the Gynaecological Oncology team and the patient, who was very keen to preserve fertility where possible, she underwent a midline laparotomy and myomectomy within 8 days of presentation where the operative findings were consistent with a 30cm pedunculated posterior cervical fibroid.

This case highlights the challenges that are faced by Gynaecologists in assessing the risk of leiomyosarcoma in an otherwise low risk individual where consideration needs to be made towards fertility needs and different options of surgical

management. A review of the existing literature will be conducted to determine an optimal management of a woman with a fibroid uterus. The significance of risk factors will be examined, as well as the reliability and sensitivity of diagnostic preoperative modalities including imaging, such as pelvic ultrasound and MRI, and serum markers such as LDH in differentiating benign versus malignant disease.

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A Combined Cystoscopic and Laparoscopic Approach of Excision of a Nodule of Endometriosis within the Urinary Bladder

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Endometriosis of the urinary bladder is a rare but severe condition. Surgical treatment requires a specialised technique for optimal outcome.

In this video presentation I will demonstrate a combined cystoscopic and laparoscopic technique to resect nodules of bladder endometriosis. Using a combined technique this difficult lesion can be safely resected. Ureters are clearly identified and avoided during the cystoscopic component. A partial thickness circumferential incision is made with monopoly diathermy. Progress is assisted by hydrodissection. Laparoscopically, the lesion is already clearly delineated and completely resected with ease. Excessive bladder resection is avoided. A two layer closure is performed.

We will present a video of this technique and up to date literature review regarding bladder endometriosis. Preoperative assessment and diagnosis, including clinical and radiological assessment is vital. Post operative course and complication rates will be reviewed.

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Medium to long-term gastrointestinal outcomes following segmental bowel resection for deep invasive endometriosis.

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Segmental bowel resections for deeply invasive endometriosis (DIE) are becoming less common with the advent of more conservative approaches such as bowel shaving and disc resection. These conservative methods demonstrate a lower complication rate, particularly for rectovaginal fistulas, anastomotic leak, haemorrhage and long-term bladder dysfunction[1,2,3]. However, in cases where conservative approached have failed, or the presence of more advanced lesions causing significant bowel stenosis or multiple rectosigmoid nodules, segmental bowel resection remains the appropriate surgical modality[1].

Aim

To share our experience of cases performed over the past 4 years and surgical technique implemented. To evaluate the gastrointestinal functional outcomes, symptoms and complications following segmental bowel resection for DIE.

Methods

A case series study was performed. Women who underwent segmental bowel resection for DIE from January 2012-December 2017 at Prince of Wales Private Hospital were included. The segment was greater than 5cm of rectosigmoid where nodules involved the muscularis, submucosa and/or mucosa. Outcomes including postoperative pain, fertility and surgical complications were collected. Data was pooled from a single database kept by the primary surgeon. Post operative gastrointestinal symptoms were assessed through the use of 4 validated questionnaires including the Gastrointestinal Quality of Life Index, the Knowles-Eccersley Scott Symptoms score for constipation, the Wexner Score for anal continence and the Bristol Stool Score.

Results

Twenty women met the inclusion criteria. The mean age was 40 years (range 33-46). All procedures were undertaken laparoscopically. Eight women (40%) underwent a hysterectomy in addition to segmental bowel resection and excision of endometriosis. Mean operative time was 182 ± 68 minutes and mean length of hospital stay was 7 ± 2 days.

Emphasis was placed on the same surgical team operating consistently, i.e. one advanced laparoscopic gynaecology surgeon together with the same colorectal surgeon. This was thought to improve surgical outcomes.

Overall, there was an improvement in medium-long term postoperative pain, fertility outcomes in women who did not undergo a concurrent hysterectomy and a relatively low risk of surgical complications and bowel dysfunction as assessed by validated questionnaires.

Conclusion

Our data demonstrates a relatively low risk of significant bowel complications post segmental bowel resection for DIE and improvements in postoperative pain and fertility. Working within a trusted surgical team and surgical techniques employed may contribute to these findings and minimise significant bowel complications.

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2. Roman H, Bubenheim M, Huet E, Bridoux V, Zacharopolou C, Darai E, Collinet P, Tuech JJ. Conservative surgery versus colorectal resection in deep endometriosis infiltrating the rectum: a randomized trial. Human Reproduction 2017 November: 29: 1-11
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Rare sequelae of tubo-ovarian abscess and subacute bowel obstruction following spontaneous necrosis of a submucosal fibroid.

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Submucosal fibroids are a common occurrence. However spontaneous necrosis of submucosal fibroid is rarely observed other than in case reports described following uterine artery embolization. To our knowledge, the sequelae of severe pelvic inflammatory disease (PID) with bilateral tuboovarian abscesses (TOA) and subacute bowel obstruction has not been reported in the published literature.

We report an interesting case in a 25-year-old nulliparous female with 9x4x4 cm prolapsing submucosal fibroid that underwent spontaneous necrosis. This patient had a 6-month history of a known 7x6x6 cm intramural fibroid that was managed conservatively. She represented to her gynaecologist with offensive vaginal discharge with repeat ultrasound confirming a 9cm prolapsing submucosal fibroid. She was urgently referred for surgical management with oral antibiotics commenced in the interim.

Immediately prior to procedure patient developed nausea, vomiting and abdominal pain. The aim of surgical management was to debulk and remove the necrotic fibroid along with a diagnostic laparoscopy to exclude myometrial or serosal uterine involvement. The diagnostic laparoscopy noted unexpected severe pelvic adhesions with severely distorted anatomy. Adhesions also involved large bowel with dilatation of bowel loops. The pelvis was occupied with large multi-lobed masses suspicious of TOA, endometriomas or an undiagnosed malignancy. Vaginal examination and limited hysteroscopy noted an open cervix with a necrotic mass originating from endometrium avulsed into the vagina. Uterine mass was debulked and sent for urgent histopathology and microscopy. Given unconfirmed pathology, a decision was made to abandon procedure and proceed to an urgent MRI and commence triple antibiotics whilst planning definitive management.

The patient underwent an MRI the next day confirming a residual submucosal fibroid and bilateral TOA with moderate gaseous distension of the large bowel and sigmoid. The patient had ongoing symptoms and a subacute bowel obstruction. A week later the second laparoscopy was performed which noted improved adhesions and tissue inflammation post intravenous antibiotics. Surgical treatment required extensive adhesiolysis, drainage of the bilateral TOA, appendicectomy and removal of fibroid that was benign on histopathology. Patient significantly improved post procedure and was discharged on day two of surgery with the resolution of all symptoms by one week.

There is minimal literature on prolapsed necrotic fibroids causing severe PID with TOA. Here we a describe the minimally invasive surgical approach with videos demonstrating both initial and second laparoscopy which demonstrate the evolution of severe PID following intravenous antibiotics treatment and removal of necrotic fibroid source.

Single incision laparoscopic myomectomy with manual morecellation utilising a tissue extraction containment system

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Background: Uterine fibroids are a common reason for women to seek medical review, with an estimated incidence of 50-70%. Symptoms related to fibroids account for more than one third of gynaecology related admissions to hospital. Fibroids are oestrogen depended benign tumors of smooth muscle and connective tissues. Which depending on size, location and quantity can contribute to a variety of quality of life disrupting symptoms such as pain, abnormal uterine bleeding, pelvic visceral obstruction and obstetric complications[1]. The AGES/ RANZCOG statement, released in 2014 in response to the FDA and TGA safety alert on tissue morcellation techniques, continues to guide best practice procedures to ensure safe tissues extraction[2].

Minimally invasive techniques for management of uterine fibroids have gained increased importance as it is well established that open myomectomy is associated with increased discomfort and adverse outcomes. The benefit of myomectomy over alternative techniques is the improved safety when fertility preservation is desired[3].

Method: Here we present an approach to a single incision laparoscopic myomectomy utilising a containment system of manual morcellation, with a video example.

Discussion: With advances in minimally invasive surgical techniques and equipment we are able to offer and better inform women of the options for the safe and effective management of uterine fibroids, in an age where there is an increasing demand for uterine and fertility preservation[3].

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B-Lynch Suture: Is it Truely Fertility Preserving? Uterine Rupture in 2nd Trimester Post Previous B-Lynch suture: A Case Report

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INTRODUCTION:

B-Lynch is known as a haemostatic surgical procedure, alone, does not seem to have a negative impact on fertility. Historically, B-Lynch suture was first used in 1989 but only described in 1997 and has been used as mechanical compression onto severely atonic uterus to control bleeding in view of preserving fertility. However, multiple case reports have cited numerous long-term complications.

CLINICAL DESCRIPTION:

31-year-old G2P1 at 17-weeks gestation, presented to ED following conscious collapse. She was pale, tachycardia and hypotensive. Abdominal examination identified a midline scar, distended and peritonitic. It was then identified that she has had a B-Lynch suture following a PPH post ventouse delivery. A FAST scan showed a large hemoperitoneum and live "intrauterine" pregnancy.

She promptly had explorative laparotomy that revealed a ruptured antero-fundal uterus with the placenta extruding approximately 6-7cm in size. Initial attempt to repair the ruptured site was performed. Unfortunately, she had a hysterectomy due to ongoing bleeding despite uterotonics. EBL was 5 litres, in which she received 18u PRBC, 5u cryoprecipitate and 3u FFP. Her postoperative course was uneventful and was discharged home on Day 4. She and her family had very extensive counselling which included surrogacy for future fertility.

DISCUSSION:

Uterine compression sutures have been theoretically taught as an established surgical method in management of severe postpartum haemorrhage despite the lack of hands on procedural opportunity. This led to the questioning of the correct technique in B-Lynch procedure following the variation of complications reported. At present, there are insufficient data on ongoing follow-up with regards to long-term outcomes. These data are essential seeing that the procedure is reserved for severe postpartum haemorrhage in view of conserving anatomical fertility, but there are emerging case reports published citing complications following the procedure ranging from uterine necrosis, Asherman syndrome and uterine perforation.

CONCLUSION:

Following the case above, a consideration for a national registry recording all B-Lynch procedures to pool data needs to be taken seriously, as it is such a rare but life-threatening occurrence. This database will facilitate future audit and prompts guideline development ensuring women with previous B-Lynch are monitored closely in future pregnancies. In addition, a greater pool of case-series enables further assessment of the value of B-Lynch suture in fertility preservation.

Uterine carcinosarcoma: treatment and outcomes over 23 years

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Background: Uterine carcinosarcoma (UC) is a rare and aggressive subtype of endometrial carcinoma associated with late stage at time of diagnosis and poor prognosis. Due to its low incidence, the optimal management of these patients following primary surgical treatment is uncertain.

Aim: To review the characteristics, treatment and outcomes of a cohort of UC cases from a tertiary gynaecology oncology unit in Melbourne, Australia.

Methods: 92 cases of UC were identified from the pathology records of four gynaeoncologists between 1994 and 2016 inclusive. Patient characteristics, histopathology reports, type(s) of adjuvant therapy, development of recurrence and survival status were extracted from patient records. Staging was determined based on histopathology reports using the contemporaneous International Federation of Gynaecology and Obstetrics (FIGO) staging system at the time of diagnosis.

Results: 33 (36%) patients were diagnosed with Stage I,15 (16%) with Stage II, 27 (29%) with Stage III and 17 (18%) with Stage IV disease. There was an overall recurrence rate of 14% and overall death rate of 49%. When compared by stage, there were no significant differences in recurrence rates, but increasing stage was associated with poorer survival and shorter intervals from diagnosis to death. When compared by types of adjuvant therapy, women who had received radiotherapy alone demonstrating the highest rates of recurrence (63%), compared to chemotherapy alone (4%) or multimodal adjuvant treatment (21%). However, this did not translate to significant differences in survival outcomes. Finally, univariate and multivariate analyses were performed to evaluate the association between various patient, disease and treatment factors with respect to survival. Age at diagnosis and stage of disease were both significant predictors of survival odds, with stage IV UC conferring the highest odds of death when compared to stage I disease (OR 12.5, 95% CI 2-79.2), and women who were older at the time of diagnosis demonstrating a small but significant increase in odds ratio for death (OR 1.06, 95% CI 1.005-1.12). No significant associations between type of adjuvant therapy and death or recurrence and death following both univariate and multivariate analyses were established.

Conclusion: In this relatively large homogenous cohort of UC cases, significant predictors for survival included age at the time of diagnosis and stage of disease. Survival was not influenced by adjuvant treatment modality or presence of recurrence. Further studies are warranted to ascertain the optimal treatment regimen to benefit this specific group of patients.

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