Australasian Gynaecological Endoscopy & Surgery Society Limited
ANNUAL SCIENTIFIC MEETING

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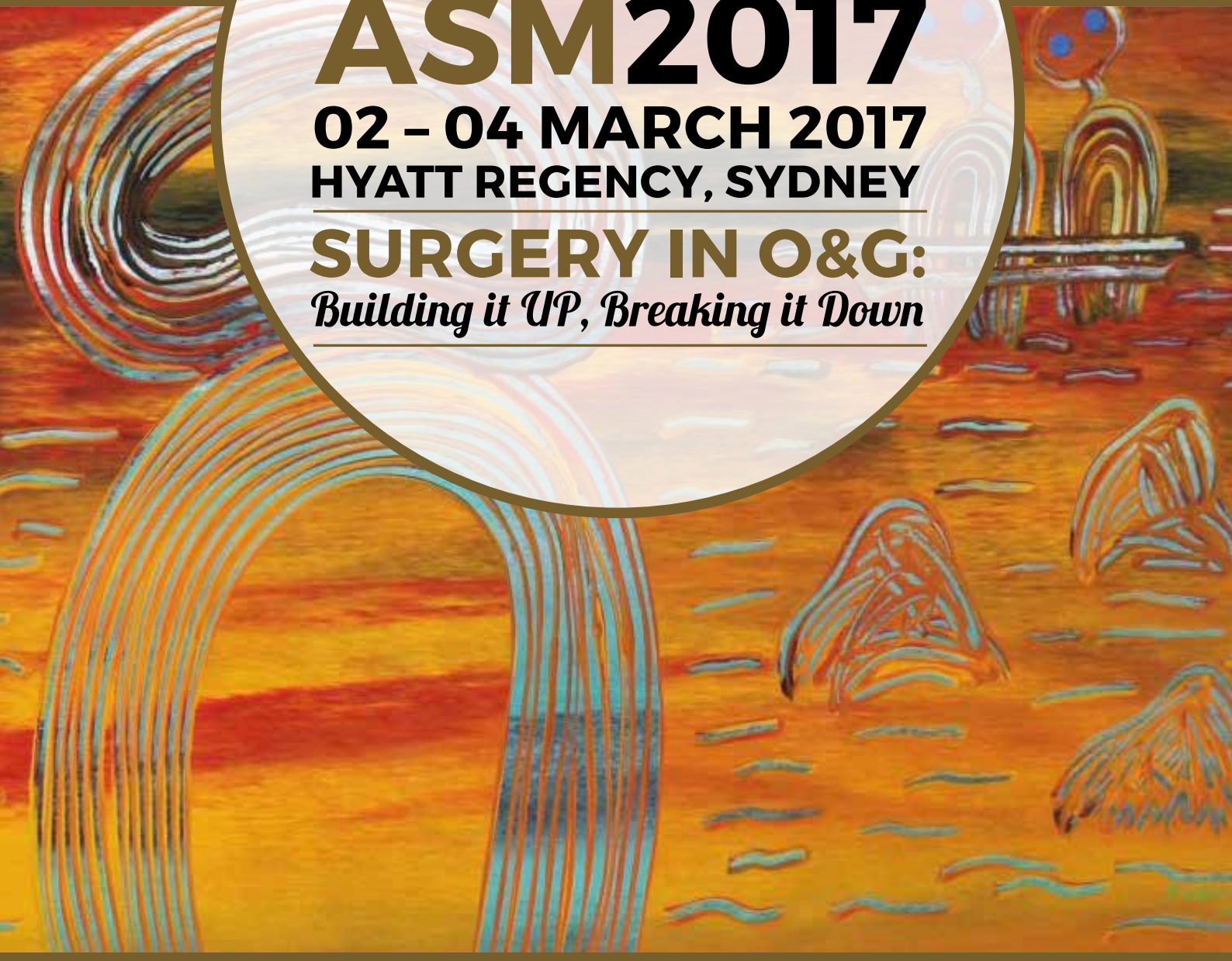
AGESXXVII ASM2017

02 – 04 MARCH 2017
HYATT REGENCY, SYDNEY

SURGERY IN O&G:
Building it UP, Breaking it Down



PROGRAM

www.ages.com.au

SURGERY IN O&G:
Building it UP, Breaking it Down

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Dr Stuart Salfinger	Committee Member
Dr Luice Wang	Committee Member
Dr Haryun Won	Committee Member

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Dr Michael Wynn-Williams	QLD
A/Prof Anusch Yazdani	QLD

CPD POINTS

This meeting is a RANZCOG Approved O&G Meeting. Fellows of this college can claim 21CPD points for full attendance

If the meeting is used for critical reflection and practice improvement, PAR points can be claimed by submitting a reflection worksheet through CPD Online.

Visit the RANZCOG website for further details.

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Membership application forms are available from the AGES website www.ages.com.au

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Welcome

Dear Colleagues,

Welcome to Sydney, where the cranes are still reaching into the skies, trucks are still carting trailers of rubbish away from buildings and every street is awash with giant holes and persons holding stop/go signs to annoy the never ending stream of traffic. Yes this is a city enveloped in progress. Everywhere you look, Sydney is Building it up and Breaking it down.

This inspiration for our AGES ASM seems the perfect backdrop to what we are facing in gynaecological and obstetric surgical skills where it is no longer acceptable to acquire a set of skills and stagnate at the completion of training utilising only those skills learned in that 15% of our professional life. With the constant change of procedures and the emergence of science to renew, replace and even remove entire surgical approaches into or out of our skill armamentarium.

We are delighted to host our international keynote speakers include Dr Kristen Matteson from Rhode Island USA, Dr Justin Clark from Birmingham UK and Dr Malcolm Munro from UCLA USA to do a lot of building and perhaps a little breaking down too. We are also pleased to welcome Prof Jon Einarsson from Boston and current President of the AAGL, who will be both presenting and introducing the AGES/AAGL exchange lecture. Our international speakers will join an eminent Australasian contingent to take you on this provocative romp through 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 and we are grateful for their participation and continuation of the strong scientific and surgical talent that AGES is renown for.

The incredibly popular Interactive Hubs are back in an expanded form with greater choice, and skill acquisition will be a central feature of the new-look trade area. You have said you want more hands on training and AGES is pleased to bring it to you within the framework of our scientific meeting. Sydney 2017 also launches "Live-Dead Surgery": surgical exploration with no boundaries. Beamed live from Brisbane, Dr Michael Wynn-Williams and Dr Danny Chou will show you places and spaces in the pelvis and abdomen that will increase your knowledge of anatomy and opportunities for surgical problem-solving.

Internationally awarded journalist Geraldine Doogue will host our final session of the meeting – a Q&A style panel discussion with a difference. Hear from women, their partners, media experts and doctors on what women think of us as surgeons, how we communicate and what they want in their surgeon. Enlightening, perhaps a little uncomfortable but certainly unforgettable. Don't miss it!

The social program is no less excising with our annual black-tie gala awards dinner at the Grand Hyatt Ballroom overlooking Darling Harbour filled with fine food and some surprises in the fine sound department. 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 Fiona Omeenyo that have graced the covers of our three meeting brochures for the previous year. Word is out that these are hot property and they will be auctioned off, with all proceeds going to Anti-slavery Australia, an outstanding charity whose mission is to provide support and legal aid for those forced into slavery within our own country. We also will be auctioning the Board Dozen – 12 bottles of outstanding wine to ensure you really enjoy your meal.

Finally it is here. Welcome to the AGES 2017 ASM. Welcome to Sydney. Welcome to the new age of AGES.

A/Prof Jason Abbott
Vice President, AGES
Conference Chair

Dr Stephen Lyons
Director, AGES
Conference Scientific Chair

INVITED INTERNATIONAL FACULTY

JUSTIN CLARK

KRISTEN MATTESON

MALCOLM MUNRO

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THURSDAY 2ND MARCH 2017

0700 - 0800	CONFERENCE REGISTRATION	**MARITIME BALLROOM FOYER**
SESSION 1 0800 - 1000	BREAKING DOWN SURGICAL SKILLS Chairs: Jason Abbott & Stephen Lyons	**GRAND BALLROOM 2**
0800 - 0810	Welcome	**Jason Abbott & Stephen Lyons**
	The Skill Drill: Evidence-Based Skill Acquisition	**Lenore Ellett**
	Hysteroscopic Skills: How Are They Different?	**Justin Clark**
	Finding The Fascia (And What To Do With It)	**Salwan Al-Salihi**
	Laparoscopic Challenges: Unfamiliar Pelvic Spaces	**Greg Robertson**
	Surgical Skills For The Fertility Surgeon – How To Get Them, How To Keep Them	**Jim Tsaltas**
	Building The Surgeon: General Surgery Teaching	**Greg Keogh**
	Learning From Others – AGES Travelling Fellowship Presentation	**Sarah Choi**
	Panel Discussion	
1000 - 1030	MORNING TEA, TRADE EXHIBITION & DIGITAL COMMUNICATIONS	**MARITIME BALLROOM & FOYER**
SESSION 2 1030 - 1215	"AN INCONVENIENT TRUTH". BUILDING UP THE EVIDENCE WITHOUT BREAKING DOWN PATIENT OUTCOMES. Chairs: Emma Readman & Tal Jacobson	**GRAND BALLROOM 2**
	"Move On, Nothing Controversial Here… Or Is There?" Ablation Vs Excision For The Treatment Of Endometriosis	**Martin Healey**
	"Just Whip 'Em Out!" When Is Removal Of The Ovaries Beneficial To Women?	**Rodney Baber**
	"Laparoscopic Myomectomy Is Dead." Discuss.	**Malcolm Munro**
	"Do I Really Have To Do That, Doctor?" Bowel Prep For Laparoscopic Surgery	**Haryun Won**
	Mirenas, Vaginal Mesh, Robots, Class Actions And You. How Do We Combat "Dr Google" And Erin Brockovich?	**Ruanne Brell**
	"The Best Is Yet To Come": Surgeons As Advocates For Evidence-Based Innovation And Gynaecologic Surgery	**Kristen Matteson**
	Panel Discussion	
1215 - 1345	LUNCH, TRADE EXHIBITION & DIGITAL COMMUNICATIONS	**MARITIME BALLROOM & FOYER**
SESSION 3 1230 - 1330	INTERACTIVE HUBS 1	**MARITIME BALLROOM & FOYER: TRADE EXHIBITION**
SESSION 4 1345 - 1530	FREE COMMUNICATIONS: CHAIRMAN'S CHOICE Chairs: Harry Merkur, Supuni Kapurubandara & Gino Pecoraro	**GRAND BALLROOM 2**
1530 - 1600	AFTERNOON TEA, TRADE EXHIBITION & DIGITAL COMMUNICATIONS	**MARITIME BALLROOM & FOYER**
SESSION 5A 1600 - 1730	BREAKING DOWN LAPAROSCOPIC HYSTERECTOMY Chairs: Haider Najjar & Olivia Smart	**GRAND BALLROOM 1**
	Hysterectomy: Where Have We Been, Where Are We Going?	**Malcolm Munro**
	Laparoscopic Hysterectomy Surgical Anatomy: Avoiding The Tigers	**Surya Krishnan**
	Step-By-Step: Energy Sources For TLH	**Simon Edmonds**
	Making The Difficult TLH Easy	**Danny Chou**
	"But Doctor, I'd Like To Keep My Cervix": The Evidence For And Against Sub-Total Hysterectomy	**Erin Nesbitt-Hawes**
	Panel Discussion	
SESSION 5B 1600 - 1730	BREAKING DOWN THE TUBES AND OVARIES Chairs: Luice Wang & Mark Ruff	**GRAND BALLROOM 2**
	Banking On The Future: Oocyte And Ovarian Wedge Freezing	**William Ledger**
	Evidenced-Based Management Of Ovarian Torsion	**Rachel Green**
	Step-By-Step: Surgical Management Of "The Good", "The Bad", And "The Ugly" Ovarian Cysts	**Stuart Salfinger**
	"Filshie Clips Are Dead… Salpingectomy Instead!" True OR False?	**Supuni Kapurubandara**
	Panel Discussion	
1730 - 1900	WELCOME RECEPTION	**MARITIME BALLROOM & FOYER: TRADE EXHIBITION**

**Program correct at time of printing and subject to change without notice. Updates available on the AGES website www.ages.com.au

FRIDAY 3RD MARCH 2017

0700 – 0755	CONFERENCE REGISTRATION	MARITIME BALLROOM FOYER
0700 - 0755	Breakfast Session: Women in Surgery	HERITAGE 2
0700 - 0755	Breakfast Session: Surgical Self-Audit: Comparing and Sharing Data	HERITAGE 3
SESSION 6A 0800 - 1100	LIVE DEAD SURGERY Chairs: Tal Jacobson & Luke McLindon Expert Panel: Alan Lam, Peter Maher, Robert O'Shea & Jim Tsaltas	GRAND BALLROOM 2
SESSION 6B 0800 – 0900	INTERACTIVE HUBS 2	MARITIME BALLROOM & FOYER: TRADE EXHIBITION
0910 - 1010	INTERACTIVE HUBS 3	MARITIME BALLROOM & FOYER: TRADE EXHIBITION
1100 - 1130	MORNING TEA, TRADE EXHIBITION & DIGITAL COMMUNICATIONS	MARITIME BALLROOM & FOYER
SESSION 7 1130 - 1300	"BUILD ME UP JUST TO BREAK ME DOWN?" TRENDS IN SURGICAL TECHNOLOGY Chairs: Haryun Won & Warren Chan	GRAND BALLROOM 2
	Myosure, Versapoint And Friends For The Surgical Management of Intrauterine Pathology... Are We Sure?	**Justin Clark**
	"The Times, They Are A-Changing": Evaluating Surgical Innovation	**Kristen Matteson**
	New Generation Laparoscopic Energy Sources: Bad For Surgical Skills And Health Budget?	**Stephen Lyons**
	"Show Me The Money!" Who Benefits From Robot-Assisted Laparoscopy?	**Malcolm Munro**
	Fibroids... What's The Fuss About MRgFUS, UAE et al.?	**Hugo Fernandes**
	Panel Discussion	
1300 - 1400	LUNCH, TRADE EXHIBITION & DIGITAL COMMUNICATIONS	MARITIME BALLROOM & FOYER
SESSION 8A 1400 - 1530	FREE COMMUNICATIONS 1 Chairs: Stuart Salfinger, Anbu Anpalagan & Haryun Won	GRAND BALLROOM 1
SESSION 8B 1400 - 1530	FREE COMMUNICATIONS 2 Chairs: Haider Najjar, Maree Wallwork & Luice Wang	GRAND BALLROOM 2
SESSION 8C 1400 - 1500	INTERACTIVE HUBS 4	MARITIME BALLROOM & FOYER: TRADE EXHIBITION
1530 - 1600	AFTERNOON TEA, TRADE EXHIBITION & DIGITAL COMMUNICATIONS	MARITIME BALLROOM & FOYER
SESSION 9 1600 - 1700	KEYNOTE PRESENTATIONS	GRAND BALLROOM 2
	Chair: Anusch Yazdani The Perpetual Dan O'Connor Lecture	**John Pardey**
	Referee: Stuart Salfinger Clash Of The Titans Endometriosis And IVF... Who Should Have A Laparoscopy? Who Should Do The Laparoscopy? Who Benefits From The Laparoscopy?	**Combatants: Anusch Yazdani Vs Jason Abbott**
1700 - 1800	AGES ANNUAL GENERAL MEETING	WHARF 3 & 4
1900 - 2230	AGES BLACK TIE GALA DINNER, AWARDS AND CHARITY AUCTION	GRAND BALLROOM 1 & 2

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SATURDAY 4TH MARCH 2017

0700 - 0755	CONFERENCE REGISTRATION	**MARITIME BALLROOM FOYER**
0700 - 0755	Breakfast Session: Humpty Dumpty Sat on a Wall: Avoiding the Fall When Taking up a New Procedure/Device	**HERITAGE 3**
SESSION 10A 0800 – 0930	BREAKING DOWN MYOMECTOMY Chairs: Simon Edmonds & Amy Arnold	**GRAND BALLROOM 1**
	Step-By-Step: Laparoscopic Myomectomy Made Simple	**Alan Lam**
	The Large Fibroid: Laparoscopy Or Laparotomy?	**Sarah Choi**
	Challenging Fibroids: Adenomyoma, Deep Intramural, Broad Ligament, Cervical And "The Bag Of Marbles"	**Haider Najjar**
	Options For Fibroid Removal At Laparoscopic Myomectomy	**Yogesh Nikam**
	Non-Surgical Management Of Fibroids	**Luice Wang**
	Panel Discussion	
SESSION 10B 0800 - 0930	BREAKING DOWN ENDOMETRIOSIS Chairs: Harry Merkur & Victoria Qin	**GRAND BALLROOM 2**
	"Recognising The Chameleon" Is The Key To Avoiding Inadequate Surgical Treatment Of Endometriosis	**Christopher Smith**
	Step-By Step: Surgical Management Of Endometriosis: The Easy And The Not So Easy.	**Kenneth Law**
	Management Of The Teenager With Incapacitating Pelvic Pain	**Rebecca Deans**
	"Peek & Shriek" Or "Soldier On"? Options When Faced With The Unexpected Finding Of Severe Endometriosis	**Harry Merkur**
	When Surgery Fails... Contemporary Non-Surgical Options For Persistent Pelvic Pain	**Thierry Vancaillie**
	Panel Discussion	
0930 - 1000	MORNING TEA & TRADE EXHIBITION	**MARITIME BALLROOM & FOYER**
SESSION 11 1000 - 1200	REGULATION IN O&G SURGERY: A FOREGONE CONCLUSION. Chairs: Rachel Green & Marilla Druitt	**GRAND BALLROOM 2**
	Surgical Self-Preservation – How Should We Gauge Surgical Outcomes?	**Emma Readman**
	"Near Misses": Beyond Surgical Morbidity And Mortality	**Russell Hogg**
	"Who, How And Why?" The Challenges Of Credentialing In The USA	**Jon Einarsson**
	Training The Trainee And Consultant: The NHS Perspective	**Justin Clark**
	Clinical Excellence And Surgery	**Karen Luxford**
	Beyond "Number Of Cases": Redefining Gynaecological Surgery Training	**Stephen Robson**
	"There's No Time Like The Present": Shared-Decision Making And Patient-Centred Care	**Kristen Matteson**
	Panel Discussion	
SESSION 12 1200 - 1300	INTERACTIVE Q&A FORUM	**Moderator: Geraldine Doogue** **GRAND BALLROOM 2**
1300 - 1330	CLOSE & LUNCH	**MARITIME BALLROOM & FOYER**

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EXHIBITION FLOORPLAN

1 SURGICALPERFORMANCE
2 TELEFLEX
3 LUMENIS
4 BOQ SPECIALISTS
5 VINNO ULTRASOUND
6 AVANT MUTUAL GROUP
7 BOSTON SCIENTIFIC
8 GRC SURGICAL
9 SONOLOGIC
10 MEDTRONIC
11 MARLIN MEDICAL
12 HOLOGIC
13 HIGH TECH LASER
14 MEDICAL DEVICES
15 KARL STORZ
16 ENDOTHERAPEUTICS
17 KOALA MEDICAL
18 LIFEHEALTHCARE
19 DEVICE TECHNOLOGY
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AGES SOCIETY ART PRIZE & AUCTION

The Australasian Gynaecological Endoscopy and Surgery (AGES) Society are proud to announce the annual AGES Society Art prize.

Fiona Omeenyo, from the Lockhart River 'Art Gang', was the winner of the AGES Society Art Prize in 2016.

Fiona's three (3) commissioned artworks were featured on the covers of the AGES Pelvic Floor Symposium 2016, AGES Focus Meeting 2016 and the AGES ASM 2017 brochures.

Fiona's artwork and the President's/Board dozen wines will be auctioned on Friday the 3rd of March at the AGES XXVII ASM 2017 Black Tie Gala Awards Dinner, with the proceeds to be donated to **Anti-Slavery Australia (www.antislavery.org.au)**, who are working tirelessly to abolish slavery at local, national and international levels.

AGES is pleased to announce the winner of the AGES Society Art Prize for 2017 is Carrie Pitcher.

LIVE-DEAD SURGERY FRIDAY, 3RD MARCH, GRAND BALLROOM 2

Surgery without limits is here. Anything you can possibly imagine being done surgically in the pelvis is yours for the choosing. With no risk to the woman on the table, but all the advantages of live surgery, see procedures, complications being caused and repaired, anatomy beyond any book or computer imaging and you direct what will be demonstrated.

Fresh frozen cadaveric dissections in and out of the pelvis will be performed by Dr's Michael Wynn-Williams and Danny Chou with exposure and explanation of side wall structures, retroperitoneal dissection and procedures that you do every day and a few more that may get you out of a critical situation. As surgeons, we can never know too much anatomy and live demonstrations of variants and procedures are a popular part of the AGES ASM. This session allows the ultimate flexibility to go where we simply have not been able to go before, to provide you with both the skills and knowledge for your practice.

The surgical team will be ably supported by evidenced based highlights and seamlessly interlaced surgical video interspersed through the demonstrations for a total surgical immersion. And for the very first time, the audience gets to choose the shots. What you want to see, where you want to go in the pelvis, how to repair and protect is chosen by you through our digital voting system.

Live-Dead Surgery is an AGES first. Come interact with us in the New Age of AGES. Only at the AGES Annual Scientific Meeting.

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NEW MEMBER BENEFITS!

> Increased savings on member registration fees of up to 15% and even 50% for those who have been members for three or more consecutive years - expired 31/01/2017
> Complimentary subscription to Surgical Performance self-auditing software
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> Complimentary subscription to the Journal of Minimally Invasive Gynaecology (formerly the AAGL Journal) or for a discounted rate the International Urogynaecology Journal
> AGES newsletter, eSCOPE, published four times annually
> Member access to AGES website with access to meeting presentations
> Listing on the Membership Directory of the AGES website
> Eligibility to apply for AGES Research Grants
> Eligibility to apply for a position in the AGES Training Program in Gynaecological Endoscopy

GERALDINE DOOGUE

Geraldine Doogue is a renowned Australian journalist and broadcaster with a distinguished career in news and current affairs. She is presenter of the ABC National Radio program Saturday Extra and ABC Television's Compass. Prior to this, she was the presenter of the ABC Radio National's Life Matters.

In 2003, she was recognised with an Officer in the Order of Australia for services to the community and media. Geraldine is an outstanding Facilitator/MC. Her forte is facilitating panel discussions and is ideally suited to a progressive-minded audience.

GERALDINE DOOGUE

AGES Q&A FORUM FACILITATED BY GERALDINE DOOGUE

SATURDAY, 4TH MARCH, GRAND BALLROOM 2 | 1200 - 1300

What do our patients really think of us? Do we communicate as well as we think we do? If you have a bad social media review, is this a restriction to your practice and what can you do about it?

AGES presents an interactive panel like never before, where patients, consumer representatives, marketing gurus and the family of the women we care for have their say. About us.

Confronting, frank and personal, this is a session you simply cannot afford to miss. Directed by award winning journalist Geraldine Doogue, the panel will debate health issues that every gynaecological surgeon needs to know. From introducing yourself as a new surgeon to interacting with women and their families about complications, the panel will dissect the questions that are the cornerstone of our surgical practice.

With questions from the floor, you get to participate in what promises to be enlightening as we expose ourselves and our profession to those that really matter. Come interact with us in the "New Age of AGES."

INTERACTIVE HUBS PROGRAM

LOCATED IN THE TRADE AREA – MEMBERS ONLY & PRE-REGISTRATION REQUIRED

Thursday, 2nd March
Interactive Hubs 1: 1230 – 1330

Friday, 3rd March
Interactive Hubs 2: 0800 – 0900
Interactive Hubs 3: 0910 - 1010

Saturday, 4th March
Interactive Hubs 4: 1400 – 1500

SOCIAL PROGRAM

WELCOME RECEPTION

Hyatt Regency Sydney
Thursday 2nd March
1730 - 1900

BLACK TIE GALA AWARDS DINNER

Hyatt Regency Sydney
Friday 3rd March
1900 – late

BREAKFAST SESSIONS

WOMEN IN SURGERY | FRIDAY, 3RD MARCH | HERITAGE 2 | 0700 – 0755
SURGICAL SELF-AUDIT: COMPARING & SHARING DATA | FRIDAY, 3RD MARCH | HERITAGE 3 | 0700 – 0755
HUMPTY DUMPTY SAT ON A WALL: AVOIDING THE FALL WHEN TAKING UP A NEW PROCEDURE/DEVICE
SATURDAY, 4TH MARCH 2017 | HERITAGE 3 | 0700-0755

FREE COMMUNICATIONS

SESSION 4: FREE COMMUNICATIONS CHAIRMAN'S CHOICE BALLROOM 2

ORAL

LUCY AITCHISON
The Ergonomics Of Laparoscopic Surgery: A Quantitative Study Of The Time And Motion Of Laparoscopic Surgeons In Live Surgical Environments

SARAH CHOI
Laparoscopic Nerve-Sparing Surgery For Deep Endometriosis – An Overview Of Neuro-Anatomy, Surgical Technique, Clinical Outcomes From Our Prospective Clinical Cohort Study And Literature Review

PRATHIMA CHOWDARY
Pilot Study To Assess The Possible Role Of The Mirena Intrauterine Device (IUD) In The Management Of Endometrial Polyps

AMANI HARRIS
Recurrent Endometriosis After Laparoscopic Surgical Treatment: A Multi-Centre Retrospective Review

SHAMITHA KATHURURSINGHE
Integrating A Same Day Gynaecology Ultrasound Service (GUS) To A Tertiary Outpatient Clinic: Will It Improve Clinical Decision Making And Patient Flow Through The Hospital System? A Pilot Study

BABAK SHAKERI
The Prediction Of Pouch Of Douglas Obliteration Using Offline Analysis Of Laparoscopic Video Sets: An Intra-, Inter-Observer And Diagnostic Accuracy Study Evaluating The Performance Of General Gynaecologists Versus Advanced Laparoscopic Surgeons

ANUSCH YAZDANI
The Fatigue Study: A Prospective Randomised Controlled Trial Of The Impact Of Fatigue On Surgeon Performance In Long Procedures

VIDEO

GEMMA BLAIN
Ovarian Ectopic Pregnancy: A Surgical Technique For Ovarian Conservation

THEA BOWLER
Vaginal Morcellation Of The Fibroid Uterus At Total Laparoscopic Hysterectomy

DEAN CONRAD
Uterine Manipulation – Tips And Tricks To Make Difficult Surgery Easy

SESSION 8 A: FREE COMMUNICATIONS BALLROOM 1

ORAL

SAM ALHAYO
Rectosigmoid Deep Infiltrating Endometriosis; Our Experience Over 6 Years

PRATHIMA CHOWDARY
Multicentre Retrospective Study To Assess Diagnostic Accuracy Of Ultrasound For Superficial Endometriosis – Are We Any Closer?

ZHENG YUAN NG
Factors Predicting The Failure Of Mid-Urethral Sling Surgery

SAMARA SABUR
The Distended Stomach: A Case Series On Gastric Injuries During Laparoscopic Entry At The Umbilicus

VIDEO

LIMA ARSALA
Live Interstitial Ectopic Pregnancy At 12+1 Weeks Gestation At The Surgical Site One Year Post Open Myomectomy

ALAN FREEMAN
Two Surgical Technique: Laparoscopic Sacrohysteropexy Made Easier And Safer With Alan Utero-Vaginal Manipulator

MADELEINE HONNER
The Royal Women's Hospital Multidisciplinary Approach To A Complex Gynaecological Case: Hereditary Coproporphyria

VALERIE TO
Team Surgeon Versus Endometriosis

DEBBY UTAMA
The Travelling Mirena: Case Review And Video Presentation

SESSION 8 B: FREE COMMUNICATIONS BALLROOM 2

ORAL

ELISE COGHILL
A Severe Inflammatory Reaction, Adhesion Formation And Pain In Response To The Use Of A Gelatin Thrombin Matrix For Haemostasis During Laparoscopic Surgery

SHAMITHA KATHURURSINGHE
A Review Of Clinical Practice In The Diagnostic Accuracy Of Magnetic Resonance Imaging (MRI) For Investigating A Fibroid Uterus

SNEHA PARGHI
Reverse Hysterectomy: A Modified Technique For Laparoscopic Hysterectomy

RONI RATNER
Endometriosis: An 8 Year Retrospective Analysis On The Surgical Outcomes And Complications In A Large Multicentre Unit In Melbourne

JESSICA TOMPSETT
Ultrasound Based Endometriosis Staging System (UBESS) To Predict Complexity Of Laparoscopic Surgery Using AGES Laparoscopic Skill Levels

VIDEO

LIOR LEVY
Uterine Rudimentary Horn In Young Female Presented With Severe Endometriosis, Bad Obstetric History And Agenesis Of Unilateral Kidney – A Case Report And Video Description Of The Laparoscopic Treatment

EMMA PATERSON
Laparoscopic Morcellation - A Contained Approach To Fibroids

CAROLIN POON
Laparoscopic Wedge Resection Of The Uterus For The Management Of A Left Interstitial Ectopic Pregnancy

RONI RATNER
Endometriosis Of The Extra-Pelvic Round Ligament: A Case Report

DIGITAL FREE COMMUNICATIONS EXHIBITION AREA

JADE ACTON
Working Hours, Roster Patterns And Fatigue Of Obstetrics And Gynaecology Trainees In Australia And New Zealand

DIMITY ARCHER
A Surprise Diagnosis Of An Ectopic Complete Molar Pregnancy: The Importance Of Surgical Management In Ectopic Pregnancies

KIRAN ATMURI
Case Review And A Toolkit For Managing Laparoscopic Port-Site Bleeding

ADELINE CHAN
The Use Of Ureteric Stents In Complex Gynaecology Surgery: A Retrospective Study

ALEXANDER CHEN
Endometriosis Surgery In Patients With High Body Mass Index, A Retrospective Cohort Study

SARAH FITZGIBBON
Endometriosis, Ureteral Duplication, And Gender Reassignment: How Does It All Fit?

ALAN FREEMAN
Total Laparoscopic Hysterectomy In 3 Easy And Safe Steps With Alan Vaginal Manipulator

ELIZABETH GOULDING
"Endometriosis Does Not Exist In Tasmania"

HOW CHUAN HAN
A Retrospective Study On The Outcomes And Efficacy Of The Manchester Procedure As A Uterine-Sparing Surgery For Uterovaginal Prolapse

LAURA HARDWICK
A Case Of Hickam's Dictum

AMANI HARRIS
Ulipristal Acetate: A Recently Approved Medical Treatment For Fibroids

PRADEESHA HETTIARACHCHI
An Interesting Case Of A Multifibroid Uterus In Pregnancy

KAREN KONG
Laparoscopic Removal Of Non-Communicating Rudimentary Uterine Horn

KAREN KONG
A Case Series Of Intravenous Leiomyomatosis And Literature Review

JUSTIN LAM
The Use Of The Da Vinci Robotic Platform In The Treatment Of Severe Recto-Vaginal Endometriosis

IHAB LATTOUF
Decision Tree Analysis Incorporating hCG Ratio Versus Risk Prediction Model (M4): Prospective Interventional Study To Rationalise The Management And Follow Up Of Women With A Pregnancy Of Unknown Location

IHAB LATTOUF
Sensitivity And Specificity Of Pretreatment hCG Ratio In Non–Surgical Management Of Tubal

Ectopic Pregnancy

REBECCA LI
A Rare Case Of A Ruptured Dermoid Cyst

TRISTAN MCCAUGHEY
Dermoid Removed, Another Life Saved. Anti-NMDA-Receptor Encephalitis Due To Ovarian Dermoid Tumours

ROSE MCDONNELL
Laparoscopic Hysterectomy Outcomes, Caseload And Training: A Retrospective Audit

ANDREW MCINTYRE
Portable Video Media As An Adjunct To Informed Consent For Gynaecological Surgery: Review Of The Literature And Abstract For A Prospective Randomised Clinical Trial

LUKE MCLINDON
Vaginal Morcellation - It's All In The Bag

KASIA MICHALAK
Evolution Of An Atypical Fibroid On MRI Over A 4 Year Period - A Case Report

KELLY MIROWSKA-ALLEN
Unplanned Hysterectomies Following Myomectomies At A Tertiary Institution

BATOOL NADIM
Correlation The Morphological Ultrasound Types Known As 'Blob' And 'Bagel' Signs With The Laparoscopic Histopathology Findings: Should Be Reclassified From Probable To Definite Ectopic Pregnancy

BATOOL NADIM
Ureterolysis At Time Of Laparoscopy For Excision Of Pelvic Side Wall Superficial Endometriosis: Introducing VACU-Lysis

STEFAAN PACQUÉE
Retrospective Audit On Laparoscopic Sacrocolpopexy With Ultra-Lightweight Mesh

LIONEL REYFTMANN
Laparoscopic Anatomy Of The Superior And Inferior Hypogastric Plexus In The Cadaver

SUMI SAHA
"All That Glitters Is Not Gold" A Case Report Of Peritoneal Inclusion Cysts And Review Of The Literature

ARCHNA SARASWAT
Fractional CO2 Vaginal Laser, Monalisa Touch: Does It Work?

BABAK SHAKERI
Cost-Benefit Analysis For The Use Of Transvaginal Ultrasound In The Work Up Of All Women With Potential Endometriosis To Minimal, Mild To Moderate And Complex Endometriosis Disease

CAMERON SHARP
Laparoscopic Wedge Resection Of Interstitial Ectopic: A Case Report

ADRIANA SUKER
Fertiloscopic And Laparoscopic Correlations, In Case Of Adhesions Or Endometriosis
ADRIANA SUKER
Spontaneous Pregnancy Rates Following Polypectomy In Case Of Infertility: A Retrospective Cohort Study

HANNAH SYLVESTER
Bladder Endometriosis: A Case Study Highlighting Important Surgical Considerations

I-FERNE TAN
Anatomical Mapping Of Deep Infiltrating Endometriosis In Accordance With The Cordes Statement

I-FERNE TAN
What Is The Anatomical Distribution Of Superficial Endometriosis In Women With Isolated Peritoneal Endometriosis?

VALERIE TO
Correlation Or Causation? A Case Report Of Endometriosis Within A Caesarean Scar Defect

KELLY VAN DEN HASPEL
The Implications And Outcomes Of A Uterine Fibroid Variant Diagnosis At Surgery: A Twelve Year Review In A Tertiary Hospital

SAMUEL VO
Correlation Between Laparoscopic Macroscopic Appearance Of Superficial Endometriosis And Histopathological Confirmation

NICOLE WHITE
And Then There Were Two - An Experience With Heterotopic Pregnancy In Tasmania

Program Abstracts
Thursday 2 March 2017

Session One: Breaking Down Surgical Skills
0800-1000
Grand Ballroom 2

How do we get it? Once obtained, how do we not lose it? The challenge of acquisition of surgical skills and their maintenance is explored in this session. Further, how local O&G training stacks up against our international colleagues is examined. The general surgeons are even given an opportunity to explain how their training methods produce the best surgeons…

The Skill Drill - Evidence-Based Skill Acquisition

Lenore Ellett[1]

1. Mercy Hospital Department of Endosurgery, Heidelberg, VIC, Australia

This session will explore the medical literature regarding simulation surgery in laparoscopic gynaecology. It is no longer appropriate in endosurgical training to "see one, do one, teach one", because the times, 'they are a-changing'. We know that complications occur more frequently in the laparoscopic learning curve than in open surgery. We also know that with the advent of safe working hours, increased numbers of trainees and improved medical treatments, our trainees get less exposure to the operating theatre than preceding generations. It is time to embrace simulation surgery.

This session will look at educational principles. It will examine several seminal papers in gynaecological simulation surgery and will attempt to convince the audience that a national Simulation Curriculum and access to appropriate training facilities should be developed.

Hysteroscopic Skills: How Are They Different?

Justin Clark[1]

1. Birmingham Women's Hospital, Birmingham, United Kingdom

The main obstacles too successful hysteroscopic surgery are access to the uterine cavity and subsequent acquisition and maintenance of optimal visualisation. Generic to other forms of endoscopy, proficient hysteroscopy requires good hand : eye co-ordination, an understanding of the relevant anatomy and spacial awareness. The laparoscopist has the luxury of time, pausing to admire his or her work, within a clearly visualised working environment. In contrast, the harder pressed hysteroscopist cannot dawdle because they face the combined challenges of maintaining a clear operative field (using instilled fluid under pressure) whilst simultaneously avoiding complications from excessive absorption of this fluid. Thus, the adoption of efficient and delicate movements during surgery are imperative to minimise trauma, reduce complications and lower operating times. High quality training and importantly an appreciation of hysteroscopic technologies are required for the hysteroscopist to excel and patient outcomes to be optimised. In addition to attaining surgical dexterity, the modern hysteroscopist has the added burden of needing to communicate effectively during procedures because technological advances in instrumentation has allowed an increasing array of intrauterine procedures to be conducted in a safer, more convenient and more cost-efficient outpatient setting.

These practical aspects of hysteroscopy including familiarisation with an ever increasing array of associated technologies, supported by evidence where available, will be discussed along with the use of electronic data collection to quality assure outcomes from hysteroscopic surgery.

Finding The Fascia (And What To Do With It)

Salwan Al-Salihi[1]

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

Abstract not yet provided.

Laparoscopic Challenges: Unfamiliar Pelvic Spaces

Greg Robertson

This session focuses on topics related to surgical training and the presentations are intended to be of interest for generalist gynaecologists as well as advanced laparoscopic surgeons.

This talk focuses on laparoscopic surgical anatomy with a special emphasis on the pelvic spaces (paravesical and pararectal spaces in particular) and the structures that bound, or are contained within the pelvic spaces, especially as they pertain to laparoscopic surgical procedures. The **paravesical space** is bound by the bladder pillars medially, the obturator internus and levator ani muscles and the pelvic sidewalls laterally, and the medial umbilical ligaments superiorly. The paravesical space is contiguous with the Cave of Retzius, or the retropubic space. Surgical relevance is related to colposuspension procedures and also as access for hysterectomy particularly following previous caesarean section. The **para-rectal space** is defined anteriorly by the cardinal ligament, medially by the rectum, posteriorly by the sacrum, and laterally by the internal iliac artery. Development of the space can allow ureteric dissection safely and reflection of the rectosigmoid colon. The **recto-vaginal space or Denonvilliers' fascia** is bordered by the rectum posteriorly, the vagina anteriorly and starts caudally at the superior margin of the perineal body (2 to 3 cm above the hymenal ring) and extends superiorly between the posterior vagina and the rectum through the posterior cul-de-sac. Its most cephalad border is the posterior cul-de-sac just inferior to the cervix. This can be important in hysterectomy in dissecting adherent bowel to the posterior aspect of the uterus

Surgical Skills For The Fertility Surgeon: How To Get Them, How To Keep Them

Jim Tsaltas[1]

1. Freemasons Medical Centre, East Melbourne, VIC, Australia

This presentation will focus on the skills that are required for fertility sparing and enhancing surgery. This presentation will focus on endometriosis surgery and upskilling from simple procedures to more complex fertility sparing procedures. I will discuss the evidence for endometriosis surgery to improve fertility outcomes. I will also discuss fibroids and the evidence for surgery and discuss surgical technique acquisition for myomectomy surgery.

Building The Surgeon: General Surgery Teaching

Greg Keogh[1]

1. Prince Of Wales Hospital, Randwick, NSW, Australia

Abstract not yet provided.

Learning From Others - AGES Traveling Fellowship Presentation

Sarah Choi[1]

1. Sydney Women's Endosurgery Centre SWEC; Complex Pelvic Surgery Unit, Liverpool Hospital, Chatswood, NSW, Australia

Abstract not yet provided.

Session Two: “An Inconvenient Truth”: Building Up The Evidence Without Breaking Down Patients Outcomes

1030-1215

Grand Ballroom 2

Can “the evidence” be bad for your patient and what should you do if you think it is? Thorny issues relating to evidence and best practice are explored, including when the patient thinks their evidence is better than yours.

"Move On, Nothing Controversial Here... Or Is There?" Ablation Vs Excision For The Treatment Of Endometriosis

Martin Healey[1]

1. Monash IVF Victoria; Royal Womens Hospital Victoria, Malvern East, VIC, Australia

There is ongoing debate about surgical treatment of endometriosis, but currently only 2 PRCTs comparing ablation and excision. These do not show a clear advantage for a particular approach, but are limited to only assessing symptom scores

as outcome measures. A wider debate is needed about what measures should be compared. Alternatives that warrant consideration are: (1) rates of re-operation for positive disease; (2) rates of using hormonal treatments within 1 year of surgery; (2) quality of life measures; (3) adhesion rates; (4) surgical costs including theatre time. In addition there is a need for evidence comparing these treatment methods for surgically managing infertility. A near vacuum of knowledge requires filling.

"Just Whip 'Em Out!" When Is Removal Of The Ovaries Beneficial To Women?

Rodney Baber[1]

1. North Shore Private Hospital, St. Leonards, NSW, Australia

Opportunistic removal of the ovaries has long been an accepted practice amongst gynaecologists. In the USA 300,000 'prophylactic bilateral salpingo-oophorectomies are performed each year with more than half that number in pre menopausal women.

Reasons are often spurious, 'whilst we are there', 'it will reduce your risk of further surgery', 'you won't even know' and 'to protect you from ovarian cancer'.

Most ovarian cancer arises in post menopausal women. It is a dreadful disease with a thankfully low incidence. The life time risk for Australian women is 1.2%.

A large body of evidence has now shown that pre menopausal oophorectomy in low risk women is ill advised. It will certainly reduce the risk of ovarian cancer but it will increase the risk of cardiovascular disease, osteoporosis and fractures, cognitive impairment and early death. Indeed, in this population, despite the effect on ovarian disease, all cause mortality is increased.

Women who carry a known genetic mutation or have a strong family history have a life time risk of cancer of between 11 and 40%. For these women early oophorectomy is an appropriate option. Timing is critical and, as with every other medical intervention, the pros and cons of the procedure must be discussed thoroughly before proceeding.
Advanced endometriosis presents other unique problems particularly with regard to repeat surgery and disease recurrence. Oophorectomy before age 40 has NOT been shown to reduce the risk of repeat surgery and should be regarded as a last option.

Managing the consequences of bilateral oophorectomy is complex and requires planning and discussion before surgery particularly in those women who cannot or will not agree to subsequent menopausal hormone therapy at least until the average age of the menopause.

"Laparoscopic Myomectomy Is Dead." Discuss.

Malcolm Munro[1]

1. David Geffen School of Medicine at UCLA, Los Angeles, CA, United States

Leiomyomas have become an increasingly common challenge for gynecologic surgeons, as they more frequently threaten or impair the fertility of a generally older group of women seeking pregnancy. Until the latter part of the 20th century, myomectomy was, essentially, exclusively performed by laparotomy, but with the availability of endoscopic instrumentation, first hysteroscopic and then laparoscopic techniques were introduced by the time the century came to a close. A number of issues challenge the value of laparoscopic myomectomy; where applicable, hysteroscopic technique is less invasive and can frequently deal with those myomas that are related to infertility, recurrent pregnancy loss and the symptom of heavy menstrual bleeding. Medical interventions and other image-guided minimally invasive techniques have the potential to deal with at least some of the clinical situations created by leiomyomas. Controversies over the use of morcellation bring into question some of the basic advantages of laparoscopic myomectomy if the only alternative is the performance of minilaparotomy. This session will explore these issues delving into the future place for laparoscopic myomectomy.

"Do I Really have to do that, Doctor?" Bowel Prep for Laparoscopic Surgery

Haryun Won[1]

1. Royal Hospital for Women, Bondi Junction, NSW, Australia

Mechanical bowel preparation is regarded as an efficient method to improve surgical visualisation and bowel handling during variety of surgical procedures. In contrast to laparotomy in which bowel can be retracted and packed to improve surgical visualisation, this cannot be achieved at laparoscopy and an empty bowel may improve visualization, particularly working in the deep pelvis in a confined space such as the posterior pelvic compartment.

This session will encompass a review of current medical literature across gynaecological and other surgical specialties on the effect of mechanical bowel preparation prior to laparoscopic surgery.

Mirenas, Vaginal Mesh, Robots, Class Actions And You. How Do We Combat "Dr Google" And Erin Brockovich?

Ruanne Brell[1]

1. Avant, Sydney, NSW, Australia

Social media platforms and the online environment can help, but also hinder, the practise of medicine. The effect of social media platforms and the abundance of information online allow the wide dissemination of information to patients and encourage discussion amongst them. This has significant impact upon the doctor-patient relationship, in shaping expectations, guiding communication and influencing how best to manage outcomes. How can the medical profession guard against the impact of these rapid changes?

"The Best Is Yet To Come": Surgeons As Advocates For Evidence-Based Innovation And Gynaecologic Surgery

Kristen Matteson[1]

1. Division of Research for the Department of Obstetrics and Gynecology, Warren Alpert Medical School, Brown University, Providence, USA

This session focuses on topics related to best available evidence and surgical outcomes and the presentations are intended to be of interest for generalist gynaecologists as well as advanced laparoscopic surgeons.

The focus of this talk is surgical innovation and the role of surgeons as advocates for the adoption of evidence-based standards for incorporation of new techniques and devices into clinical practice profession-wide. This talk will involve a discussion of different ways to measure benefits and harms to patients and society and how much is enough scientific evaluation for new surgical innovation and devices. This talk will also cover what history has taught us about incorporation of new technologies into clinical practice and thoughts on how surgeon-advocates can be the drivers for conscientious, but appropriately expeditious, incorporation of new technologies into clinical practice in the present and future.

Session Three: Interactive Hubs 1

1230-1330

Maritime Ballroom & Foyer

Trade Exhibition

By registration only.

Session Four: Free Communications: Chairman's Choice

1345-1530

Grand Ballroom 2

The best of the best… Oral presentations of the best abstracts as chosen by the Conference Chairman.

The Ergonomics Of Laparoscopic Surgery: A Quantitative Study Of The Time And Motion Of Laparoscopic Surgeons In Live Surgical Environments

Lucy P Aitchison[1], **Cathy K Cui**[1], **Amy Arnold**[1], **Erin Nesbitt-Hawes**[1], **Jason Abbott**[1]

1. School of Womens and Children's Health, University of NSW, Sydney, NSW, Australia

Background: Laparoscopic surgery presents multiple ergonomic difficulties for the surgeon, requiring awkward body postures and prolonged static muscle loading that increases risk for musculoskeletal strain and injury. This prospective study quantitatively measures the biomechanical movements of surgeons during laparoscopic procedures to determine at-risk movements from prolonged static muscle loading and repetitive motions that may lead to injury.

Methods: 150 video recordings of 18 surgeons, standing at the patient's left were captured from three fixed camera positions during live gynecological laparoscopic surgery. Post-operative processing quantified surgeon movements at the neck, shoulders and elbows using computer software to measure extreme joint angles and time spent within defined joint angle ranges.

Results: Surgeons spent a median of 98% (range 77-100%) of surgical time with their neck rotated at 21° (range 0-52°). The non-dominant arm was subjected to more extreme positions for significantly longer periods of time compared to the

dominant, with shoulder flexion at 45-90° for 35% vs. 0% (p<0.001) and elbow flexion at >120° for 31% vs. 0%, (p<0.001) of total surgical time. Procedures involving power morcellation required significantly greater number of instrument insertion/removals - 119 (range 56-182) compared with 12 (range 2-122) when morcellation was not used (p<0.001). Shorter surgeons maintained significantly greater degrees of neck rotation when viewing the monitor (p<0.003) and surgeons with shorter arm lengths spent longer in extreme positions with their non-dominant shoulder at >90° (p=0.04) and elbow at >120° (p<0.001) compared with taller surgeons. No significant correlations were found between BMI or surgical experience and more extreme joint positions.

Conclusions: Four primary areas have been identified where surgeons are consistently demonstrating movements that increase their risk of harm: 1. extended periods of neck rotation; 2. asymmetrical loading between the dominant and non-dominant shoulders; 3 power morcellation and frequent insertions/removals of laparoscopic instruments resulting in repetitions of the most extreme shoulder positions; 4. a negative correlation between height and percentage time spent in more extreme positions.

Video Presentation

Ovarian Ectopic Pregnancy: A Surgical Technique For Ovarian Conservation

Gemma Blain[1], Jason Abbott[1]

1. The Royal Hospital for Women, Randwick, NSW, Australia

Ovarian ectopic pregnancies are rare, representing 0.96 – 6% of all ectopic pregnancies[1]. A number of surgical techniques have been described for management of this condition, including oophorectomy, partial oopherectomy and ovarian wedge resection[2], with laparoscopy becoming the standard surgical approach.

We describe the case of a 42 year old woman who presented to the emergency department at 8 weeks gestation with a 7 day history of vaginal spotting and mild cramping. Ultrasound revealed a right adnexal mass of 19x19x18mm with a fetal pole of 4mm and fetal heart rate present, consistent with live ectopic pregnancy. The patient was consented for laparoscopic right salpingectomy for management of the ectopic pregnancy. At the time of laparoscopy, no tubal ectopic pregnancy was visualised, however a right ovarian vascular mass was demonstrated, consistent with a right ovarian ectopic pregnancy. We present the video demonstrating the laparoscopic management of the ovarian pregnancy. 0.5% Marcain with adrenaline was infiltrated to the right ovary at the base of the ectopic pregnancy. A purse string suture was then performed to further secure haemostasis, and the products of conception resected off the ovary using monopolar, followed by oversewing of the base.

1. Joseph R, Irvine, L. Ovarian ectopic pregnancy: aeitiology, diagnosis and challenges in surgical management. Journal of Obstetrics and Gynaecology. 2012; 32: 472 – 474.
2. Dejinmi F, Rizzuto M, MacRae R, Olowu O, Hussain M. Diagnosis and laparoscopic management of 12 consecutive cases of ovarian pregnancy and review of literature. Journal of Minimally Invasive Gynaecology. 2009; 16: 354-359.

Video Presentation

Vaginal Morcellation Of The Fibroid Uterus At Total Laparoscopic Hysterectomy

Michael Wynn-Williams1, Luke McLindon1, Thea Bowler[1]

1. Department of Obstetrics and Gynaecology, Mater Mothers' Hospital, Brisbane, QLD, Australia

Most benign gynaecology surgery is undertaken very successfully by minimal access surgery with reduced post-operative pain, faster recovery and improved patient satisfaction. TLH for the enlarged fibroid uterus, while technically challenging and surgically satisfying , has the added dimension of potentially seeding previously undiagnosed neoplasm with laparoscopic morcellation. A balance needs to be struck, one that enables a laparoscopic approach, while reducing the small but real risk of harm with laparoscopic uterine and fibroid morcellation.

This video demonstrates one such technique. The enlarged perimenopausal fibroid uterus can be approached laparoscopically, uterine arteries isolated and ligated, uterus and cervix surgically excised then safely and efficiently removed vaginally using the Alexis Containment System and a small Alexis retractor. The specimen is easily manually morcellated using a scalpel while remaining completely contained within the extraction bag, thus maintaining a minimally invasive approach and eliminating risk of dissemination of undiagnosed malignancy.

Laparoscopic Nerve-Sparing Surgery For Deep Endometriosis – An Overview Of Neuro-Anatomy, Surgical Technique, Clinical Outcomes From Our Prospective Clinical Cohort Study And Literature Review

Sarah Choi[1, 2, 3], Marcello Ceccaroni[3], Roberto Clarizia[3], Giovanni Roviglione[3], Francesco Bruni[3]

1. Sydney Women's Endosurgery Centre, Sydney, NSW
2. Complex Pelvic Surgery Unit, Liverpool Hospital, Sydney, NSW
3. Gynecologic Oncology and Minimally Invasive Pelvic Surgery, International School of Surgical Anatomy, Sacred Heart Hospital, "Ospedale Sacro Cuore-Don Calabria", Negrar, Verona, Italy

Background: Surgical excision of deeply infiltrative endometriosis (DIE) aims to remove visible areas of endometriosis, restore anatomy by division of adhesions, relieve painful symptoms and, in some cases, enhance fertility. Its success critically depends on the balance between the completeness of surgical removal of symptomatic pathologies and the preservation of pelvic organ functions. Incomplete excision of endometriotic lesions is associated with higher recurrence rates and persistent symptoms. On the other hand, inadvertent damage to pelvic structures during extensive surgical dissection can lead to bladder, bowel and sexual dysfunctions in the young women of reproductive age. In nerve-sparing DIE surgery, autonomic visceral pelvic nerves are protected during radical endometriotic excision, in order to minimize post-operative pelvic organ dysfunction without compromising surgical efficacy.

Methods: The anatomical distribution of autonomic visceral pelvic nerves is illustrated. A step-by-step surgical technique for laparoscopic nerve-sparing DIE surgery is described with supporting operative images and video footages.
In our single-centred, prospective cohort study, clinical outcomes of laparoscopic nerve-sparing DIE surgery were compared with the classical laparoscopic DIE surgery. Peri-operative data, complications, post-operative questionnaires on quality of life, pelvic pain and bladder/bowel/sexual dysfunctions were collected.
Data on post-operative outcomes of nerve-sparing DIE surgery was also retrieved from published research articles in MEDLINE and the Cochrane Library databases.

Results: In our prospective cohort trial, a total of 126 patients were analyzed. Sixty-one patients were treated with nerve-sparing DIE surgery and 65 were treated with the classical technique. Intra- and peri-operative complications were similar between the two groups. Overall severe bladder/rectal/sexual dysfunctions were significantly lower after nerve-sparing surgery. Recurrence rate was comparable between the two groups.
Similar to the experience of our centre, literature review demonstrated that nerve-sparing DIE surgery results in lower pelvic organ dysfunctions, better quality of life and similar recurrence rates in comparison to classical technique.

Conclusions: The nerve-sparing technique in DIE excisional surgery is feasible and reproducible. Surgeon's thorough knowledge of functional and surgical anatomy of the autonomic pelvic neural system is instrumental in protecting vital nervous structures at the most complex form of DIE surgery. This advanced surgical procedure is recommended in selected referral centres with large case volumes and skilled laparoscopists.

Pilot Study To Assess The Possible Role Of The Mirena Intrauterine Device (IUD) In The Management Of Endometrial Polyps

Prathima Chowdary[1], Tony Ma[1], Marsali Newman[1], Lenore Ellett[1], Peter Maher[1], Emma Readman[1]

1. Mercy Hospital for Women, Melbourne, VICTORIA, Australia

Objective: To test the hypothesis that LNG-IUS can treat endometrial polyps confirmed at outpatient hysteroscopy in premenopausal women. This will allow assessment of whether a larger RCT in the future is feasible.

Method: We did a prospective pilot study, in which premenopausal women who had polyp diagnosed on ultrasound scan and outpatient hysteroscopy were assigned to either LNG-IUS device group or control group and booked for GA hysteroscopy and polypectomy within 2 months.
Current management of premenopausal patients with persistent dysfunctional uterine bleeding +/- ultrasound evidence of endometrial polyps is confirmation of the presence of the endometrial polyp at outpatient hysteroscopy and sampling by pipelle followed by booking for general anesthetic hysteroscopy D+C polypectomy. There is a delay of two months between the two procedures.

Results: A total of 39 patients were included in the study, with 19 in the intervention group and 20 in the control group. The mean age was 43.6 (SD = 5.6) and 43.2 (SD = 8.1) in the two groups, respectively. No difference was found in duration between two procedures between the intervention and control groups (mean 92 vs 84 days, p=0.73). However, the proportion of polyp present at operation was significantly higher in the control group (80% vs 37%; relative risk (RR) 2.17; 95% CI [1.16, 4.07]; p=0.0062).

Conclusion: In our pilot study we found that Mirena is a reliable treatment option for polyps in premenopausal women, and will also be beneficial in patients with heavy menstrual bleeding. This is the first study to show regression of endometrial polyps post treatment with Mirena by direct visualisation at outpatient hysteroscopy.

Video Presentation

Uterine Manipulation – Tips And Tricks To Make Difficult Surgery Easy

Dean Conrad[1], Greg Cario[1], David Rosen[1], Stefaan Pacquee[1], Paul Atkinson[1], Danny Chou[1]

1. SWEC, Sydney

Uterine manipulators have undergone dramatic change since the early days of laparoscopic gynaecology. A simple curette was often the only available tool for uterine manipulation, which was only marginally improved by the use of a Spackman Cannula. Delineation of the cervical cuff wasn't possible until the late Prof Tony McCartney's original design of a simple tubular structure with a bevelled edge became available. Today, a multitude of new and increasingly complex devices provide surgeons with more uterine manoeuvrability and more options for cervical cuff placement.

But how important is the uterine manipulator? We usually entrust the most junior members of the team with this job. However, a detailed knowledge of how to effectively utilise the different types of manipulators can turn a difficult procedure into a straightforward one.

This talk will outline the advantages and disadvantages of several popular devices currently available and provide video presentations by Sydney Women's Endosurgery Centre (SWEC) outlining several tips and tricks to assist generalist laparoscopic surgeons in all areas of practice.

Recurrent Endometriosis After Laparoscopic Surgical Treatment: A Multi-Centre Retrospective Review

Amani Harris[1], Oshri Barel[1], Jim Tsaltas[1], Haider Najjar[1], Hugh O'Connor[1]

1. Endosurgery Unit, Monash Health, East Bentleigh, VIC, Australia

Introduction: Laparoscopic excision plays a crucial role in the management of endometriosis and is associated with symptom relief, improved reproductive outcome and increased quality of life. Even with experienced laparoscopic surgeons, 6-51% of women will have a recurrence of endometriosis within 5 years of surgery. The main aim of this study is to retrospectively evaluate the incidence and severity of recurrent endometriosis, success rates of surgery, medical treatment and associated risk factors for recurrence, in a multicentre hospital network.

Methods: This is a Multi-centre retrospective review of patients diagnosed with endometriosis at Monash Medical Centre from July 2009 to June 2016. The demographic characteristics, stage of endometriosis, associated medical conditions; type of surgery and other medical treatment were evaluated. Student T-Test and Chi Square Test were used to compare variables.

Results: A total of 354 patients were included in this study. The number of patients diagnosed with stage 1 and 2 endometriosis were 187 (52.8%) and 132 (37.3%) stages 3& 4. 200 (56.5%) patients had excision and ablation of endometriosis, 21 (6%) had only ablation.

Pain was an indication for surgery in 295 (83.3%) patients, endometrioma in 103 (29.1%) and infertility in 60 (16.9%). A total of 189 (53.4%) patients with pain as an indication underwent operative laparoscopy (excision and/or ablation) for management of their endometriosis. Of these, 52(27.5%) had complete symptom resolution, 91(48.1%) had improvement in their symptoms and 37 (19.5%) had no change in their symptoms at the 6-8 week post-operative review.

Recurrent pain symptoms were reported in 84 (44.4%) patients on further follow-up. The average time for symptom recurrence was 8.1 months (range 0-72 months, SD 15.4). Of those patients, 55 (65.5 %) were diagnosed as having stage 1&2 and 27 (32.1%) stages 3&4. There was no significant difference between the stage of endometriosis or patient age and the incidence of recurrent pain symptoms.

Conclusion: Our study confirms the high rate of complete cure and improvement in patient symptoms with laparoscopic excision of endometriosis. However, in accordance with previous studies, the risk of recurrence is high with a median time to recurrence less than one year. Our results further outline a higher but not significant recurrence rate in younger patients at first laparoscopy. We did not find a good correlation of endometriosis stage and recurrent pain symptoms.

1. T. Tobiume. Determinant factors of postoperative recurrence of endometriosis: difference between endometrioma and pain. European Journal of Obstetrics & Gynecoogy and Reproductive Biology. Vol 205.Oct 2016
2. M.E. Coccia, F. Rizzello, A. Palagiano, G. Scarselli. Long-term follow-up after laparoscopic treatment for endometriosis: multivariate analysis of predictive factors for recurrence of endometriotic lesions and pain. Eur J Obstet Gynecol Reprod Biol, 157 (2011), pp. 78–83
3. J. Abbott, J. Hawe, D. Hunter, M. Holmes, P. Finn, R. Garry. Laparoscopic excision of endometriosis: a randomized, placebo-controlled trial. Fertil Steril, 82 (2004), pp. 878–884

Integrating A Same Day Gynaecology Ultrasound Service (GUS) To A Tertiary Outpatient Clinic: Will It Improve Clinical Decision Making And Patient Flow Through The Hospital System? A Pilot Study

Shamitha Kathurusinghe[1], Lima Arsala[1], Karen Kong[1], Ricardo Palma Dias[2], Catarina Ang[1]

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

2. Ultrasound Services, Royal Women's Hospital , Parkville, VIC, Australia

Pelvic ultrasound is a vital imaging modality for many gynaecological conditions. However, a lack of timely access to high quality imaging can hinder clinical decision making undermining patient care. In the outpatient setting the consequences may include multiple appointments prior to definitive management, burdening of public clinics and patient dissatisfaction. We propose that a dedicated same day ultrasound service within a gynaecology clinic will improve clinical decision making. We also propose that timely clinical decisions will likely result in patients reaching their intended clinical destination earlier with reduction of return appointments. As a result, patients may also report increased patient satisfaction.

Following hospital governance approval, GUS conducted by a COGU specialist or trainee was performed simultaneously during a weekly gynaecology clinic. An allocation algorithm was devised and eligible patients were given an appointment at triage of referral or by the treating gynaecologist on the day. A handout with information regarding the appointments and a patient satisfaction survey was provided to the patient. The final ultrasound report was made available to the gynaecologist at time of patient review.

From April to December 2016 a total of 30 clinics were conducted with GUS availability. Ninety-nine patients proceeded to a combined GUS scan and clinic appointment. The median age was 38.6 years with 60 patients attending as new patients. Heavy menstrual bleeding and confirmation of external ultrasound findings were the most common indications for a GUS scan. Following the combined appointments over 75 percent of patients reached their final clinical destination including wait listing by appointment conclusion. This resulted in a reduction of future appointments otherwise required for the same patient cohort. Furthermore, waitlisted patients had surgery within the appropriate category waiting period with type of surgery and presentation evaluated to identify cohort most suitable for future GUS. A control group was used for outcome comparison following GUS introduction. Other outcomes included patient and clinician satisfaction of service. Sixty eight patients completed the survey with over 85% indicating satisfaction of care received.

From our pilot study we observed that a same day GUS improves time to clinical decision making. This allows patient to reach their final clinical destination in advance leading to increased patient and clinician satisfaction. Efficient processing of patients through the hospital system also results in additional patient access to the outpatient clinics. We anticipate combining our study with a cost benefit analysis and securing long term funding to continue future service provision.

The Prediction Of Pouch Of Douglas Obliteration Using Offline Analysis Of Laparoscopic Video Sets: An Intra-, Inter-Observer And Diagnostic Accuracy Study Evaluating The Performance Of General Gynaecologists Versus Advanced Laparoscopic Surgeons

Babak Shakeri[1], Batool Nadim[1], Shannon Reid[1, 2], Timothy Chang[2], Luk Rombauts[3], Martin Healey[3], Danny Chou[4], Dehya Al-Mashat[1], Shakil Ahmed[5], Robert Magotti[1], Ralph Nader[1], Alan Adno[5], George Condous[1, 2]

1. Nepean Hospital, Penrith, NSW, Australia

2. LaSGeG (Laparoscopic Surgery for General Gynaecologists), Sydney, NSW, Australia

3. Monash IVF, Melbourne, VIC, Australia

4. The Sydney Women's Endosurgery Centre, Sydney, NSW, Australia

5. Liverpool Hospital, Sydney, NSW, Australia

Objectives: What is the diagnostic accuracy and inter-/intra-observer agreement among general gynaecologists and advanced laparoscopic surgeons in the prediction of pouch of Douglas(POD) obliteration (secondary to endometriosis) at offline analysis of laparoscopic videos?

Methods: Reproducibility study involving offline viewing of pre-recorded videosets (n=33) of women undergoing laparoscopy in order to determine the presence of absence of POD obliteration. Ten observers, five generalists (AGES level 3) and five advanced laparoscopists (AGES level 6). Gold standard for diagnosis of laparoscopic POD obliteration was determined by GC and GR. Ten observers were asked to record if POD was non-obliterated/partially obliterated/completely obliterated based on videos viewed offline. Observers were also asked to reanalyse same videos, albeit in a different order, at least 7 days later to assess for intra-observer agreement. Inter- and intra-observer correlation was performed to determine the agreement among the ten different observers as well as within and between the two different groups (general gynaecologists versus advanced laparoscopic surgeons). Diagnostic accuracy among ten observers (and the two different groups) were also evaluated. Cohen's κ coefficient <0(poor agreement), 0.01-0.20(slight agreement), 0.21-0.40(fair agreement), 0.41-0.60(moderate agreement), 0.61-0.80(substantial agreement) and 0.81-0.99(almost perfect agreement).

Results: At laparoscopy, 19 (58%) cases with POD non-obliteration, 5 (15%) with partial POD obliteration and 9 (27%) with complete POD obliteration. The accuracy, sensitivity, specificity, PPV and NPV for the advanced laparoscopists vs the general gynaecolgists for both videosets were 83.9%/79.1%, 88.5%/79.4%, 89.2%/88.1%, 92.0%/89.9%, 84.7%/76.1%, respectively. The overall agreement of the same observer between the first and second videosets for diagnosis varied from fair to substantial (Kappa:0.331 to 0.675) for different observers. However, the overall agreement between observers for the description of POD was moderate (Kappa:0.495). The agreements were moderate to substantial (Kappa: 0.588 and 0.675) on non-obliterated and completely obliterated PODs. Advanced laparoscopists had slightly higher within group inter-observer agreement (Kappa: 0.574) compared to the generalists (Kappa: 0.485). The advanced laparoscopists achieved overall almost perfect agreement (kappa = 0.81) on POD description between two videosets for diagnoses. The intra-observer variability was lower for the generalists (Kappa: 0.638) compared to the advanced laparoscopists (Kappa:0.807), who achieved an overall substantial agreement.

Conclusions: The overall diagnostic performances and intra-/inter-observer correlation of the advanced laparoscopic surgeons were better than the general gynaecologists. This indicates that advanced laparoscopists are more likely to correctly classify the state of the POD compared to the generalist when assessing offline laparoscopic videosets.

The Fatigue Study: A Prospective Randomised Controlled Trial Of The Impact Of Fatigue On Surgeon Performance In Long Procedures

Anusch Yazdani[1, 2,] **Simon McDowell**[3, 2,] **Donna Spooner**[1], **Paul Dux**[1], **Emily Ford**[1, 2,] **Ben Kroon**[3, 2]

1. Gynaecology, University of Queensland, Brisbane, Queensland, Australia
2. QFG, Brisbane, QLD, Australia
3. Eve Health, Brisbane, QLD, Australia

Introduction: Surgery is a highly demanding discipline, requiring appropriate clinical acumen, advanced visuospatial skills, and the capacity to make appropriate, time critical decisions. It is therefore not surprising that operator fatigue, as defined by physical and/or mental exhaustion, may impact on clinical care.

Objectives: The Fatigue Study assesses the multidimensional impact of fatigue on surgeon performance over the course of single, full day operating session (15 hours), utilizing validated neuropsychological and visuospatial instruments.
The study assesses the capacity of surgeons to perform motor tasks, multitask, sustain and shift attention over the period of standard (less than 4 hours), long (more than 4 hours) and prolonged (more than 8 hours) operating sessions.

Design: Prospective Randomised Controlled Study (Canadian Task Force Study Classification: I).

Methodology: Subjects completed a diary in the week prior to the study. Participants were excluded from the use of stimulants in the 24hrs prior to the study.
The study was performed in the Surgical Skills Development Centre, on a single day from 0700 to 2250. Participants were computer randomization to the control or study group on the day of study.
The control group proceeded with activities of daily living, returning to the centre for testing.
The study group were subject to a simulated theatre environment, performing a series of visuo-spatial tasks over a 15 hour period.

Subjects were submitted to the following assessments:
1.Sustained Attention to Response Task (inhibition and sustained attention).
2.Psychological Refractory Period (multitasking).
3.Operation Span (working memory).
4.Mental Rotation (visuo-spatial reasoning).
5.IMMERSION (visuo-spatial competence)
6.Fatigue Score (self-assessed visual-analog score)

The study was powered to detect an inter- and intra-group difference of 50% (alpha=0.05, beta=0.2)in the composite score. Smaller differences were judged not to be clinically significant.
Statistical analysis was performed using SPSS for parametric and non-parametric distributions as appropriate.
The study was approved by the QFG Ethics Committee.

Results: There was no significant difference between the control and study groups for age, gender or seniority. There was no significant difference in any of the assessed parameters between the study and control groups. While there was an increase in the subjective assessment of fatigue, this did not translate into a statistically significant change in any of the assessable parameters.

Discussion: This prospective randomised control trial demonstrates that there is no significant impact of fatigue on visuospatial or psychometric parameters over the course of a prolonged operating session (15 hours).

Session Five A: Breaking Down Laparoscopic Hysterectomy

1600- 1730

Grand Ballroom 1

Vaginal is meant to be the best, and abdominal the worst for the patient, but laparoscopic is the type of hysterectomy preferred by most gynaecologists. Reasons why this should be are presented in this session, along with information on the anatomy, methodology, technology, and tips & tricks relating to TLH that should keep gynaecologists of all skill levels happy.

Hysterectomy: Where Have We Been, Where We Are Going?

Malcolm Munro[1]

1. David Geffen School of Medicine at UCLA, Los Angeles, CA, United States

It took nearly two centuries for hysterectomy to evolve from a concept to a successful procedure, a process that required some combination of anatomic insight, surgical daring, technical advance, and the luck of women who happened to be in the right place at the right time with the right pathology. By the latter part of the 20thcentury, hysterectomy became so common in some societies, that it was promoted as a health enhancing procedure by some authorities, applicable to women with a broad variety of symptoms, or none at all. Controversies surrounded technique – supracervical or total; vaginal or by laparotomy and by the end of the last century, laparoscopically-directed removal of the uterus evolved as an additional option later to be supplemented by the assistance of a device that many call a "robot". However, the last part of the century also heralded the introduction of a number of minimally invasive procedural alternatives to hysterectomy, ranging from loop excision of the cervix, to endometrial ablation and uterine artery embolization; and by the early 21st century the role for hysterectomy became further eroded by the development of a number of systemic and locally administered pharmaceutical agents. This session will review this odyssey, and contemplate the future role of hysterectomy in benign gynecology.

Laparoscopic Hysterectomy Surgical Anatomy: Avoiding The Tigers

Surya Krishnan

Abstract not yet provided.

Step-By-Step: Energy Sources For TLH

Simon Edmonds

Significant progress has been made from the early days of suturing and diathermy.
The myriad of products on offer have revolutionised the handling, sealing and cutting of tissue.
So why do so many surgeons still use a knife and fork with a bit of electrical current running through it?
Prepare to be challenged and brought into the 21st century.

Making The Difficult TLH Easy

Danny Chou[1]

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

Dr Harry Reich performed the first laparoscopic hysterectomy in 1989 and ever since then surgical techniques for laparoscopic hysterectomy has constantly evolved. This has been helped along by numerous innovative surgical instrumentations. Over the years with increasing developments of non hysterectomy options for menorrhagia together with our increasing level of laparoscopic surgical ability plus public expectation we are faced with more and more difficult cases of laparoscopic hysterectomy. They would include patients with high BMI, previous major laparotomy, large and difficult fibroid uterus, adherent bladder from previous Caesarean section or severe endometriosis. Whilst surgical instrumentations such as advanced vessel sealers, articulated manipulator with colpotomy cup and power morcellator aid in achieving certain task of the procedure, one cannot escape the fundamentals of surgery, which are the thorough understanding of anatomy and good anatomical dissection skill. As hysterectomy is an excisional surgery, devascularization is a crucial step, which can be achieved in different ways, some of which could make certain situation easier. Certain instrumentation such as angled laparoscope may be absolutely essential such as in cases of large obstructing fibroid. Extending anatomical knowledge to retroperitoneal spaces allows approaching ureter and uterine artery in a more strategic manner in location that is unaffected by peritoneal pathology such as in severe endometriosis and large fibroid uterus. This presentation will highlight commonly encountered difficult TLH with tips and tricks that can make them "Easy"

"But Doctor, I'd Like to Keep my Cervix": The Evidence For and Against Sub-Total Hysterectomy

Erin Nesbitt-Hawes[1]

1. Royal Hospital for Women, Randwick, NSW, Australia

Just how important is the cervix once the uterus is gone? In this session, Dr Erin Nesbitt-Hawes will present the evidence for and against sub-total hysterectomy. Key areas such as sexual pleasure, risk of prolapse and surgical and post-operative complications will be discussed. In addition, the presentation will outline approaches to ensure informed consent for these women.

Session Five B: Breaking Down The Tubes And Ovaries

1600- 1715

Grand Ballroom 2

The previously common expression "it's OK she's got another one", referring to the imminent removal of a torted ovary, is fortunately slowly being removed from the gynaecologist's lexicon. In this session, modern methods to maintain fertility and ovarian function are examined as well as the possible consequences of surgical menopause. The modern opinion of the Fallopian tubes is not so positive!

Banking On The Future: Oocyte And Ovarian Wedge Freezing

William Ledger[1]

1. University of New South Wales, RANDWICK, NSW, Australia

Few would argue that to attempt to preserve the fertility of young people about to undergo gonadotoxic chemotherapy is "a good thing". Cryopreservation of sperm and embryos is now a mature and reasonably reliable technology and pregnancy and livebirth rates after fertilisation of cryopreserved oocytes have improved substantially following introduction of vitrification (snap-freezing) of oocytes a decade ago. These technological improvements have led to rapid growth in "egg freezing" for social reasons, allowing women to defer pregnancy to beyond their most fertile years, along with the opportunity to give realistic chances of starting a family to the long term survivors of cancer treatment.

Ovarian tissue cryopreservation is still at a much earlier stage of development. Over 50 live births have now been reported worldwide after re-grafting of ovarian tissue into the pelvis or at other sites, with both natural and post-IVF pregnancies. However success rates remain low. In the future we hope to be able to derive oocytes from frozen/thawed ovarian tissue and maturation and fertilisation *in vitro*, improving chances of a healthy pregnancy and avoiding the possibility of inadvertently regrafting the cancer back into the patient.

This talk will discuss procedures, success rates and practicalities involved in oocyte and ovarian tissue banking and explore future prospects.

Evidence-Based Management Of Ovarian Torsion

Rachel Green

Ovarian torsion is an important but uncommon gynecological emergency. It is thought to occur in around 5% of all gynecological related presentations to the emergency department. It diagnosis can be challenging with no imaging modality showing specific signs. Timing of diagnosis is critical to allow for ovarian preservation.

Risk factors for torsion include increasing ovarian volume (PCOS, Ovarian cysts, Malignancy, ART), concurrent pregnancy and menopausal status.

There has been a shift in the management of this condition over recent years. The classic approach of Oophorectomy has now been replaced by more conservative measures such as detorsion and Oophoropexy.

BUT:

How long is too long for ovarian conservation? Who and when should Oophoropexy be performed? Should a 2 stage approach be considered.

This presentation will examine the questions above, and a literature review will provide the recent evidence in the treatment of this uncommon condition.

Step-By-Step: Surgical Management Of "The Good", "The Bad", And "The Ugly" Ovarian Cysts

Stuart Salfinger

Abstract not yet provided.

"Filshie Clips Are Dead... Salpingectomy Instead!" True OR False?

Supuni Kapurubandara[1]

1. Westmead, Parramatta, NSW, Australia

Over the last decade we have seen a significant shift in surgical practice due to accumulated evidence that strongly suggests the fallopian tube to be the site of origin for majority of high grade serous malignancies both in low and high risk populations. Notably the rates of opportunistic salpingectomy at the time of hysterectomy has been increasing over the last few years both locally and internationally. However, opportunistic salpingectomy as an option of permanent contraception appears to be less common.

This session will go over an evidence based review of the management of the Fallopian tubes at the time of tubal sterilisation to determine if we can continue to use Filshie clips or not.

Friday 3 March 2017

Breakfast Session: Women In Surgery

0700- 0755

Heritage 2

Breakfast Session: Surgical Self-Audit: Comparing And Sharing Data

0700- 0755

Heritage 3

Session Six A: Live Dead Surgery

0800- 1100

Grand Ballroom 2

Cadaveric pelvic dissections performed live and on demand to display the key pelvic landmarks pertinent to operative gynaecologic laparoscopy. With no limits to examining spaces and places in the pelvis, this first in AGES education provides a perfect opportunity to examine anatomy and procedures that are not possible in the live patient. Edited surgical videos will be presented in juxtaposition to highlight the surgical anatomy key to the various procedures.

Session Six B: Interactive Hubs 2

0800- 0900

Maritime Ballroom & Foyer

Trade Exhibition

By registration only.

Session Six B: Interactive Hubs 3

0910- 1010

Maritime Ballroom & Foyer

Trade Exhibition

By registration only.

Session Seven: "Build Me Up Just To Break Me Down?": Trends In Surgical Technology

1130- 1300

Grand Ballroom 2

Technological advancements are generally viewed positively by society, especially in the field of medicine. Surgeons are particularly enthusiastic about using new "surgical toys". But, away from the hype, who decides if these new technologies work? If they do, who decides if the cost of the technology outweighs the benefit to the patient? These and other old chestnuts will be cracked in this session.

Myosure, Versapoint And Friends For The Surgical Management Of Intrauterine Pathology... Are We Sure?

Justin Clark[1]

1. Birmingham Women's Hospital, Birmingham, United Kingdom

Focal pathologies within the uterine cavity are still best removed by hysteroscopy. These lesions include: endometrial polyps, submucous fibroids, focal endometrial disease, uterine adhesions, congenital uterine anomalies, cervical niches and chronic retained products of conception (RPOC). The conventional tools of the trade have been traumatic, large diameter resectoscopes and conversely fragile mechanical instruments, namely scissors and a variety of forceps. The operative hysteroscopist of the past, armed with such apparatus, risked treatment failure arising from the limitations of the available equipment as well as adverse events from the necessity for general or regional anaesthesia and inadvertent trauma from blind cervical dilatation, the need to insert large diameter hysteroscopes or retrieval of excised tissue from within the uterine cavity.

In recent times, technological advancement has produced bipolar resectoscopic systems minimising the likelihood of complications from fluid overload. The development of miniature bipolar electrodes has allowed polyps to be removed efficiently in an outpatient setting. These miniature electrodes can also be deployed to remove grade 0 submucous fibroids en-bloc or in a few segments, avoiding the creation of nuisance 'chips' of fibroid tissue which obscure the surgeons view. Perhaps the most exciting recent advance in instrumentation has been the introduction of bespoke hysteroscopic tissue removal systems. These technologies allow the hysteroscopist to overcome their traditional nemesis; specimen retrieval down a narrow cervical canal. Tissue removal systems incorporate simultaneous tissue cutting and retrieval, importantly under direct vision, without the use of potentially dangerous electrical energy or the need for traumatic, blind instrumentation. Small diameter tissue removal systems have been designed for the outpatient removal of endometrial polyps and larger systems for the removal of submucous fibroids and RPOC.

Thus, the modern hysteroscopist has the luxury of adopting a variety of tools. However, the progressive hysteroscopist needs to appreciate the specific strengths and weaknesses of their new armamentarium; not only do they need to understand their mechanism of action and instruction for use but also the evidence-base supporting their adoption relative to existing equipment for the treatment of particular intrauterine pathologies. In this way hysteroscopic surgical treatment of intrauterine pathology can be optimised in terms of safety, feasibility and effectiveness.

"The Times, They are A-Changing": Evaluating Surgical Innovation

Kristen Matteson[1]

1. Division of Research for the Department of Obstetrics and Gynecology, Warren Alpert Medical School, Brown University, Providence, USA

This session focuses on topics related to new surgical technologies and the presentations are intended to be of interest for generalist gynaecologists as well as advanced laparoscopic surgeons.

This talk focuses on the role of the surgeon as a critical evaluator of new endoscopic surgical technologies. This talk will cover the key questions surgeons should be asking themselves when they are evaluating whether or not to utilize a new surgical innovation or device. Also covered will be a brief history of the evidence-based medicine in gynaecology along with steps surgeons can take ensure they are up-to-date experts on the evidence that pertains to their clinical practice.

New Generation Laparoscopic Energy Sources: Bad For Surgical Skills And Health Budget?

Stephen Lyons[1]

1. North Shore Obstetrics & Gynaecology, North Sydney, NSW, Australia

Gynaecologists of the new millenium are spoilt for choice with respect to cutting-edge surgical technologies. For example, there have been rapid developments in robot-assisted laparoscopy and vaginal mesh kits – however, these technologies have been linked to either minimal increases in patient outcomes or adverse patient outcomes. It has been argued that the shorter learning curves for these technologies relative to the traditional equivalent surgeries is not necessarily an advantage and may actually result in loss of surgical skills overall.

Gynaecologists are also spoilt for choice when it comes to new generation laparoscopic energy sources. These devices are purported to seal vessels more rapidly and transect tissues more efficiently than conventional bipolar and monopolar devices – the available evidence does not consistently justify the hype around new generation energy sources, however. The, perhaps controversial, assertion that consistent use of these relatively expensive devices may be deleterious to both surgical skills and health budget will be explored in the presentation.

"Show Me The Money!" Who Benefits From Robot-Assisted Laparoscopy?

Malcolm Munro[1]

1. David Geffen School of Medicine at UCLA, Los Angeles, CA, United States

The dawn of the new century saw the introduction of a surgical system comprising high definition imaging, laparoscope stabilization, and remote controlled articulated hand instrumentation designed to “assist” the performance of laparoscopic surgery. This highly expensive system, called a “robot” – despite the absence of autonomous function generally required to deserve the name – has become both disruptive and pervasive in several specialties in several countries, a circumstance that rightly demands a critical assessment of its value. Who profits from these systems? Patients? Surgeons? Health Care Systems? Executives and stockholders? This session will explore the evidence regarding the value of gynecologic laparoscopy performed with the da Vinci device to help determine its utility in surgery of the female reproductive tract.

Fibroids... What's The Fuss About MRgFUS, UAE et al.?

Hugo Fernandes[1]

1. Epworth Richmond, Prahran, VIC, Australia

Abstract not yet provided.

Session Eight A: Free Communications 1

1400-1530

Grand Ballroom 1

Presentations by AGES members, AGES advanced trainees as well as researchers and presenters from our specialty highlighting the evidence and techniques that improve surgical outcomes for our patients.

Rectosigmoid Deep Infiltrating Endometriosis; Our Experience Over 6 Years

Sam Alhayo[1], **Babak Shakeri**[2], **Shannon Reid**[3], **Tim Chang**[3], **Walid Barto**[1], **George Condous**[2]

1. Colorectal Unit, Department of Surgery, Nepean Hospital, Sydney, NSW, Australia

2. Acute Gynaecology, Early Pregnancy and Advanced Endoscopic Surgery Unit, Nepean Hospital, Sydney Medical School Nepean, University of Sydney, Sydney, NSW, Australia

3. LaSGeG , (Laparoscopic Surgery for General Gynaecologists), Sydney, NSW, Australia

Objectives: We present our surgical experience over the last 6 years in the management of rectosigmoid deep infiltrating endometriosis (DIE).

Methods: Prospective study of consecutive women reviewed in the Endogynae Clinic at Nepean Hospital with suspected bowel endometriosis who were scheduled for combined Colorectal / Gynaecological laparoscopic surgery between 2011 - 2016. All women underwent detailed ‘deep endometriosis scan’ to map disease location and extent. Preoperative Colorectal specialist review and colonoscopy was arranged. Historical, demographic data and details of combined surgical

procedures and immediate outcomes were all collected and analysed. Simple and advanced statistical analysis was performed using SPSS v24 software.

Results: 339 consecutive women underwent surgery during the study period. 63/339 (18.5%) women with stage IV bowel endometriosis were included in the final analysis. Mean age at combined operative intervention was 33.6 years. 57.1% had previous laparoscopy for endometriosis, 10 of those were identified with previous rectosigmoid DIE with mean age of its onset at 29.2 years. Average duration of pelvic pain was 41.5 months prior to last surgery. 54% of women described lower abdominal pain alone or in combination with right and left iliac fossa pains. 25% received oral contraceptive pills (OCPs) preoperatively. 47/63 (74.6%) women had negative sliding sign and Pouch of Douglas (POD) obliteration noted prior to surgery. Majority of endometriotic nodules noted in surgery, alone or in conjunction with other areas, were located in the anterior rectal wall (71.4%) followed by rectosigmoid region (36.5%). All procedures were done in laparoscopic fashion by a gynaecologist and a colorectal surgeon. 49.2% women had segmental bowel resection and primary anastomosis, 42.8% had anterior 'rectal wall shaving' combined with other gynaecological intervention. Other procedures included rectal discectomy (8%), appendicectomy (5%) and recto-sigmoid shave (3%). No covering stoma was formed in any of the procedures. There were no immediate or interim major complications post-operatively.

Conclusions: Although the numbers are small, appropriate laparoscopic intervention can be achieved through a multidisciplinary team approach that should ideally involve both gynaecology and colorectal preoperative input to achieve best results with least complications. We recommend further evaluation to establish long term patient outcomes.

Video Presentation

Live Interstitial Ectopic Pregnancy At 12+1 Weeks Gestation At The Surgical Site One Year Post Open Myomectomy

Lima Arsala[1], Shamitha Kathurursinghe[1], Andrew Dobrotwir[1], Martin Healey[1], Catarina Ang[1]

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

Surgical management of benign asymptomatic fibroids is a controversial area of modern gynaecology. This is due to the inherent immediate surgical risks, as well as the long term risks of placental adhesive disorders, abnormal placentation and uterine dehiscence for future pregnancies.

We discuss the case of a 34 year old multiparous lady who had multiple uterine fibroids, the largest measuring 7cm in diameter, who was advised against surgical management due the asymptomatic nature of her condition. The patient pursued private surgical care and was treated with an open myomectomy. One year subsequent to this, she presented with a live 12+1 week pregnancy with placental myometrial invasion, consistent with an interstitial pregnancy, overlying the previous myomectomy site. Ultrasound assessment of the fetus demonstrated a live fetus with a crown lump length of 58 mm and normal biparietal diameter with well-formed organs and normal anatomy. MRI imaging also confirmed an 8cm gestational sac containing a fetus within the myometrium of the right uterine cornua, with notable thinning of the myometrium over the pregnancy abutting the serosa, with no evidence of acute rupture.

After careful consideration, this was managed with a total abdominal hysterectomy and bilateral salpingectomy via midline laparotomy at 12+2 weeks gestation. Here we review the ultrasound and MRI images and discuss the histopathology found of the fetal post-mortem, placenta and uterine pathology via a short video presentation

Multicentre Retrospective Study To Assess Diagnostic Accuracy Of Ultrasound For Superficial Endometriosis – Are We Any Closer?

Prathima Chowdary[1], Kate Stone[1], Kate McIlwaine[2], Emma Readman[2], Marilla Druit, Melissa Cameron[2], Lenore Ellett[1], Tony Ma[1], Peter Maher[1]

1. Mercy Hospital for Women, Melbourne, VICTORIA, Australia

2. Obstetrics and Gynaecology, Epworth Freemasons, Melbourne, Victoria, Australia

Objective: To establish whether the Ultrasound findings of minimal endometriosis are confirmed at laparoscopy and that a correlation can be established as to the anatomical sites in this mild form of the disease.

Method: The clinical histories of 53 patients who had laparoscopy to investigate pelvic pain were reviewed. The laparoscopies were performed at three major hospitals by surgeons trained in advanced laparoscopy and all of whom work in a tertiary endometriosis referral centre. Patients with deep infiltrative endometriosis(DIE) or non- endometriosis pelvic pathology on either MRI or ultrasound were excluded from the study. Ultrasounds were performed by single sonologist with expertise in endometriosis assessments between 2012 – 2015. The ultrasound findings were divided into sub groups as follows – presence of utero sacral ligament thickness, thickened peri colic fat, ovarian mobility and focal tenderness. These was compared with operative findings of those patients with superficial endometriosis. Other parameters collected were age, BMI and symptoms –dysmenorrhoea, dyschezia, dysuria and dyspareunia. Standard diagnostic and agreement statistics were calculated to assess the predictive effects of individual ultrasound markers and symptoms on operation

findings. Sensitivity, specificity and ROC curves are presented.

Results: Seventy nine percent (42 / 53) of the patients had laparoscopic findings consistent with their ultrasound findings (95% CI 68-90%, p<0.0001). Of the subgroups that we reviewed utero sacral thickening (p < 0.05) and thickened peri colic fat (p < 0.05) were the most associated with superficial endometriosis at the time of laparoscopy. Those with utero sacral thickening had significantly higher BMI than those without thickening (29 vs. 24 kg/m^2, p=0.003). No association was found between age and operation findings or symptoms. Of the symptoms, dysmenorrhoea had the highest sensitivity (0.98, 95% CI 0.87-0.99) but a very low specificity (0.18, 95% CI 0.02-0.52).

Conclusion: Endometriosis is a complex and heterogeneous condition. Superficial endometriosis is an inflammatory disease affecting the pelvic peritoneum. Appropriate early triage for these patients has been shown to improve outcomes. There are no specific non-invasive methods of diagnosing superficial forms of endometriosis, whilst the ability to reliably detect deep infiltrative endometriosis on ultrasound is well established.

Markers on ultrasound that reliably demonstrated that inflammation (thickened utero sacral ligaments and thickened peri colic fat) were shown to be significantly associated with the disease. We believe that accurate assessment of utero sacral ligaments is the key to identifying this peritoneal or superficial endometriosis.

Video Presentation

Two Surgical Technique: Laparoscopic Sacrohysteropexy Made Easier And Safer With Alan Utero-Vaginal Manipulator

Alan Freeman[1]

1. Even Women's Health, Brisbane, QLD, Auatralia

Pelvic organ prolapse (POP) is a common health problem. The lifetime risk of women undergoing a surgery for POP is 19% (1). POP can cause number of symptoms, ranging from physical discomfort, psychological and sexual complaints to occupational and social limitations. Women can present with uterine or utero-vaginal prolapse. Worldwide, hysterectomy is a common operation that is carried out for uterine prolapse even though the literature about the benefits of doing hysterectomy for uterine prolapse is inconclusive (1). Furthermore, patients may prefer preserve the uterus when they have not completed their family.

One procedure for uterine descent with uterine preservation is laparoscopic sacrohysteropexy. It has less morbidity and quicker recovery compared to abdominal procedure. It was shown that laparoscopic sacrohysteropexy is highly effective for improving symptoms (94%) and anatomy (98%) (2).

However laparoscopic sacrohysteropexy can be challenging because uterine vessels, vesico-vaginal fascia, recto-vaginal fascia and sacral promontory need to be dissected. Mesh arms usually passed through broad ligaments windows, lateral to uterine vessels.

It was demonstrated that laparoscopic cerclage can be easily and safely carried out with Alan (previously known as Titiz) utero-vaginal manipulator (3).

This video presentation demonstrates two surgical techniques: Surgical technique 1: Passing the mesh arms through broad ligaments windows, lateral to the uterine vessels. Surgical technique 2: Passing the mesh arms medial to the uterine vessels (similar to laparoscopic cerclage surgical technique). It also demonstrates how Alan utero-vaginal manipulator assist for easy and safe dissection of uterine vessels, vesico-vaginal fascia and recto-vaginal fascia.

1. Van IJsselmuiden et al. Hysteropexy in the treatment of uterine prolapse stage 2 or higher: a multicenter randomized controlled non-inferiority trial comparing laparoscopic sacrohysteropexy with vaginal sacrospinous hysteropexy (LAVA-trial, study protocol). BMC Womens Health. 2014 Sep 17;14:112.
2. Kupelian AS et al. Laparoscopic wrap round mesh sacrohysteropexy for the management of apical prolapse. Int Urogynecol J 2016;27(12):1889-1897
3. Titiz H (Freeman A). Tips and Tricks: Pre-conceptional laparoscopic cervical cerclage made easier and safer with Titiz(Alan) utero-vaginal manipulator. J Minim Invasive Gynecol 2015; 22(6):932-933.

Video Presentation

The Royal Women's Hospital Multidisciplinary Approach To A Complex Gynaecological Case: Hereditary Coproporphyria

Madeleine Honner[1], Shamitha Kathurusinghe[1], Karen Kong[1], Catarina Ang[1]

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

Introduction: Hereditary coproporphyria (HC) is a rare acute hepatic porphyria. A multisystem disorder leading to severe dysfunction of neurological, gastroenterological and cutaneous organ systems.

Recurrent acute attacks of porphyria occur only in the minority of HC patients. In women they are typically cyclical, with exogenous sex hormones thought to impair the production of haem biosynthesis, thus triggering an attack. Severe cyclical pain related to menses can be debilitating, with a significant impact on quality of life.

Method: We present the case of a 44-year-old nulliparous woman with HC, suffering from severe cyclical attacks, requiring frequent Intensive Care Unit admissions. Having maximised her frequency of haem arginate infusions for symptom control, and being allergic to GnRH analogues - medical treatment options were exhausted. After extensive counseling and planning, the decision was made to undergo an elective total laparoscopic hysterectomy and bilateral salpingo-oophorectomy.

Given coproporphyria is also exacerbated by cumulative light exposure, we describe the techniques used to minimise this exposure. These include museum light filters applied to theatre lights and a filtered laparoscopic light-stack to minimise intra-abdominal light exposure.

Results: The patient has made a full recovery and her symptoms are being closely observed.

Discussion: There is limited literature and no established 'evidence-based' approached to such a complex porphyria patient. Multidisciplinary care and a management plan that aligns with the patient's desires and reproductive stage of life is key to an acceptable surgical management plan. Careful consideration and planning must be undertaken to prevent an acute porphyric crisis – an event with rapid progression and potentially catastrophic outcomes.

Factors Predicting The Failure Of Mid-Urethral Sling Surgery

Zheng Yuan Ng[1], How Chuan Han[1]

1. KK Women's and Children's Hospital, Singapore, SINGAPORE

Purpose: Various factors have been investigated for their association with the outcome of mid-urethral sling (MUS) surgery. Our institution routinely performs pre-operative and 6 month post-operative urodynamic evaluation for patients. We aimed to assess the predictive value of demographic and urodynamic parameters in predicting postoperative outcomes.

Methods: A total of 606 cases of pure MUS were conducted between 1999 and 2015. Data for 500 cases were available, and the remaining cases were lost to follow-up or had missing data. The retropubic approach (TVT or TVT-Exact) was selected for patients with low preoperative maximum urethral closure pressure (MUCP) and the transobturator route (TVT-Obturator or TVT-Abbrevo) was used in patients with normal MUCP, although this was ultimately dependent on the surgeon's discretion and patient's preference. Treatment failure was defined by subjective complaint of stress urinary incontinence (SUI) and/or demonstrable SUI on examination at 1 year follow-up. Patients were separately analysed based on whether they underwent trans-obturator or retropubic MUS.

Results: In both groups, a higher pre-operative MUCP was not significantly associated with treatment success. In the retropubic MUS group, there was a significant increase in post-operative MUCP in the treatment success group (mean +6.2cmH2O, p=0.02), with no significant change in the failure group. There was no significant association between the pre-operative urethral functional length and volume of leak on treatment outcome. A higher BMI, particularly above 30, was significantly associated with failure in the trans-obturator surgery group. More vaginal births, previous surgery for SUI and co-existent urgency or urge urinary incontinence were also significantly associated with treatment failure in the trans-obturator group. However, these factors did not reach significance in the retropubic MUS group.

Conclusions: There are conflicting data on factors that predict the outcome of MUS surgery. Some studies have demonstrated an association between pre-operative urodynamic parameters, such as MUCP, on postoperative outcomes. Our findings, however, did not support this. Our data suggested that post-operative urodynamic evaluation may add valuable information about treatment outcome, with an increase in MUCP correlating with treatment success. We also found a significant association between greater number of vaginal births, higher BMI, a post-menopausal status, recurrent instead of primary surgery, and the presence of concomitant urgency with a higher chance of failure in the trans-obturator group. Further research is still necessary to better characterise the factors that accurately predict failure. Thorough pre-

operative counselling is crucial to manage the outcome expectations of MUS surgery.

1. Chai, T, Moalli, P, Richter, H et al. Preoperative Urodynamic Parameters (Valsalva Leak Point Pressure and Maximum Urethral Closure Pressure), Urinary Collagen and Plasma Vitamin D Levels as Predictors of Mid Urethral Sling Surgery Outcome. J Urol (2016) Sep;196(3):819-23.
2. Xia, Z, Qian, J, Chen, Y et al. Does body mass index influence the outcome of midurethral sling procedures for stress urinary incontinence? Int Urogynecol J (2016). doi:10.1007/s00192-016-3181-7
3. Agarwal A, Rathi S, Patnaik P, et al. Does preoperative urodynamic testing improve surgical outcomes in patients undergoing the transobturator tape procedure for stress urinary incontinence? A prospective randomized trial. Korean J Urol. 2014;55:821-7.

The Distended Stomach: A Case Series On Gastric Injuries During Laparoscopic Entry At The Umbilicus

Samara Sabur[1], Supuni Kapurubandara[1], Yogesh Nikam[1], Alan Tong[1], Richard Bellingham[1]

1. Obstetrics & Gynaecology, Westmead Hospital, Westmead, NSW, Australia

Laparoscopy is widely used in gynaecological surgery due to its numerous benefits which include shorter recovery, better cosmetic result and reduced rates of blood loss, infection and adhesion formation. The procedure is usually performed under general anaesthesia with positive pressure face-mask ventilation prior to endotracheal intubation. The standard point of entry is at the umbilicus where a veress needle is inserted through the abdominal wall and confirmatory tests ensure correct placement before pneumoperitoneum is established via carbon dioxide insufflation.

The overall rate of complications is reported to be low (0.18-0.41%) and half occur during abdominal entry with veress needle or trocar injury to blood vessels, solid organs or hollow viscous.[1] Gastric injury with laparoscopic entry at the umbilicus is an uncommon complication which can have dangerous sequelae such as gastric content leakage, abscess and fistula formation if not recognised and managed immediately. Patient factors such as obesity, short stature, gastroptosis, colon peristalsis dysfunction and aerophagia secondary to anxiety have been described as inherent risk factors in previous reports. However, the most common cause has been gastric distension secondary to positive pressure face-mask ventilation.[2]

General anaesthesia and endotracheal intubation with moderate hyperventilation is the most appropriate form of anaesthesia for laparoscopic gynaecological surgery to manage the airways and prevent gastric content regurgitation associated with pneumoperitoneum and steep Trendelenburg positioning. Pre-oxygenation with face-mask ventilation for 1-3 minutes is necessary whilst awaiting muscle relaxants to take effect prior to intubation, however this carries up to 26.6% risk of inadvertent gastric insufflation.[3] Thus, it is imperative that a surgeon considers the possibility of gastric distension and perforation when entering the abdominal cavity for laparoscopy.

We present 4 cases of gastric injury which occurred on laparoscopic entry at the umbilicus during gynaecological surgery in patients with no inherent risk factors. The cause identified in each case was significant distension of the stomach to the level of the umbilicus. A review of the existing literature, preventative measures, management and follow up will be discussed and a video presentation of laparoscopic repair of a gastric perforation will be demonstrated.

1. Parvais MA, Pervais MA. Iatrogenic gastric perforation during laparoscopy presenting on anaesthesia monitor. Ann R Coll Surg Engl 2014; 96: e14–e15
2. Nezhat CH, de Fazio A, Nezhat CR. Laparoscopic repair of gastric perforation secondary to umbilical trocar insertion. J Minim Invasive Gynecol. 2005 Mar-Apr;12(2):171-3
3. Ho-Tai LM, Devitt JH, Noel AG et al. Gas leak and gastric insufflation during controlled ventilation: face mask versus laryngeal mask airway. Can J Anaesth. 1998 Mar;45(3):206-11.

Video Presentation

Team Surgeon Versus Endometriosis

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This video aims to show how a multidisciplinary approach with a team of different subspecialty surgeons is crucial in managing the most complex endometriosis cases. This is illustrated through one of the most aggressive fibrotic deep infiltrating endometriosis ever seen with multi-organ involvement.

She is a 31 year old G0 with several previous laparoscopies. At her first surgery under our care, endometriosis was so severe that only a diagnostic laparoscopy and cystoscopy was performed. Subsequently with the urologist and colorectal surgeons on board, she underwent extensive adhesiolysis, excision of a 5x5x4cm full thickness bladder nodule, resection of 10cm of rectosigmoid colon due to full circumferential involvement and excision of fibrotic endometriosis plaques on the pelvic side walls. Three years later, due to recurrent pain and plans for conception, repeat laparoscopy revealed aggressive disease including a 5x3cm recurrent bladder nodule, widespread small and large bowel adhesions and a rock hard plaque in the right pelvic side wall potentially involving the external iliac vessels and ureter and causing hydronephrosis. She was

given a GnRH agonist with dienogest to control her symptoms.

Eventually, to control her pain, repair organ damage and in view of upcoming IVF, she was taken back to the operating theatre with the endometriosis gynecological surgeon, urologist, colorectal surgeon as well as the vascular surgeon, all of whom she had seen preoperatively for appropriate planning and counselling. During the procedure, clear communication between the endometriosis surgeon and the rest of the team was essential to ensure safe and complete removal of endometriosis. Ureteric stents were inserted, large full thickness bladder nodule removed, bowel adhesions cleared off, endometriosis excised, including the right sided rock hard plaque which invaded to the psoas muscle but thankfully did not involve the external iliac vessel. All was performed laparoscopically.

The same teamwork and communication was at play during her post-op care, characterized by a very slow recovery and development of fever and tachycardia. She improved with percutaneous drainage of a pelvic collection and IV antibiotics without need for a re-operation. She was discharged after 3 weeks. Multidisciplinary teams are essential in coordinating optimal care for patients with multi-organ endometriosis involvement.

Video Presentation

The Travelling Mirena: Case Review And Video Presentation

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1. Frankston Hospital, Frankston, VIC, Australia

2. Mercy Hospital for Women, Heidelberg, Victoria, Australia

The levonorgestrel-containing intrauterine system, sold under the trade name of Mirena is a highly effective, long acting reversible contraception. Due to the added benefits of reducing period pain and heavy bleeding, Mirena is gaining popularity amongst clinicians and patients.
Mirena has a very low risk of major complications, with a quoted rate of 1 per 1000 for uterine perforation being one of the most serious (1). Most perforations occur at the time of insertion but partial perforation may occur initially with delayed complete perforation (2). The Mirena may migrate and cause injury to other organs. Other intrauterine devices, such as the copper T, have caused perforations of the bowel and bladder, but this has not been reported for the Mirena.
This case review and video presentation shows laparoscopic adhesiolysis and retrieval of a Mirena that has travelled and embedded into an epiploic appendix and wrapped around the sigmoid colon.

Case: A 35 year old fit woman with a history of 2 vaginal deliveries and a LLETZ had a Mirena inserted in 2013 for contraception. Since the Mirena insertion, she reported unusually heavy periods with dysmenorrhea and bowel pain. Routine examination by her GP confirmed the presence of Mirena strings protruding out of the cervix, as expected.
In early 2016, she fell pregnant and had a termination of pregnancy. There was no Mirena seen in-utero at that stage. Ultrasound revealed a posterior uterine perforation with strings within the cavity and a Mirena between the uterus and the sigmoid colon. CT of the pelvis confirmed that the Mirena was in the Pouch of Douglas, interposed between the uterus and the sigmoid colon with some possible granulation tissue around it, but no evidence of a perforation.
At laparoscopy, the sigmoid was seen plastered to the cervix and the Mirena caught in the epiploic appendix with the sigmoid colon folded over itself where the Mirena was embedded. Laparoscopic adhesiolysis and removal of Mirena was performed.

At the three months follow-up, the patient reported resolution of symptoms.

Conclusion: It is very important to identify a perforation and migrated Mirena as it has the potential of causing injury to other organs. The World Health Organisation recommends prompt removal of migrating IUDs regardless of type and location (3).

1. National Institute for Health and Clinical Excellence (NICE). Long-acting reversible contraception: the effective and appropriate use of long - acting reversible contraception. 2005.
2. Markovitch O, Klein Z, Gidoni Y, Holzinger M, Beyth Y. Extrauterine mislocated IUD: is surgical removal mandatory? Contraception. 2002; 66(2):105–108
3. World Health Organization (WHO) Mechanism of Action, Safety and Efficacy of Intrauterine Devices (WHO Technical Report Series No. 753) Geneva, Switzerland: WHO; 1987. pp. 48–63

Session Eight B: Free Communications 2

1400-1530

Grand Ballroom 2

Presentations by students, trainees and consultants on research projects, surgical techniques or audit, and case reports of interest to the AGES membership.

A Severe Inflammatory Reaction, Adhesion Formation And Pain In Response To The Use Of A Gelatin Thrombin Matrix For Haemostasis During Laparoscopic Surgery

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1. Obstetrics and Gynaecology, The Royal Brisbane and Women's Hospital, Brisbane, Queensland, Australia

2. The Royal Women's Hospital, Melbourne, Victoria, Australia

Introduction: Achieving haemostasis while limiting destruction of healthy tissues is a common surgical goal. This is especially relevant in Gynaecology where preservation of ovarian function in women of reproductive age is highly desirable and can be challenging during laparoscopic surgery where it is often difficult to apply direct pressure to a bleeding site. Several products have been developed to aid haemostasis without the surgeon having to resort to overuse of electrocautery or suture placement.

Products incorporating a gelatin thrombin matrix are dispensed as a-foam like substance with a laparoscopic applicator. They are very effective but there have been reports of adverse events with these products including chronic pain, adhesion formation and an inflammatory, granulomatous reaction.

We have conducted a retrospective cohort study of all women in whom these products were used during laparoscopic Gynaecological surgery at RBWH over two years.

Methods: The operating room management information system was used to determine which patients had a gelatin thrombin matrix used during laparoscopy between May 2013 and July 2015. The electronic medical record was then used to determine which of these patients had persistent post-operative pain or subsequent surgery demonstrating an inflammatory reaction and adhesions.

Results: Of 96 women identified as having had a gelatin thrombin matrix used for haemostasis, 10 (10.41%) had repeat laparoscopies at RBWH during which adhesions and inflammation were seen in all cases. Histology on the tissues sampled revealed a severe granulomatous inflammatory reaction. A further 2 have ongoing post-operative pelvic pain and 2 had hysterectomies, which were complicated by severe adhesions. In all, 14 (14.58%) patients have experienced significant problems post-operatively.

Discussion: These results correlate with other published reports of granulomatous reactions, adhesion formation and pain following the use of a gelatin thrombin matrix during laparoscopy. Our experience with these products has shown us that their use in laparoscopic surgical procedures is not necessarily without risks, and these risks should be weighed up against any potential benefits. The authors would caution against the routine or liberal use of these products, especially in women of reproductive age where fertility is still desired, and would limit their use to situations of emergency bleeding or where conventional means of haemostasis are unsuccessful. Additionally, a low threshold for re-exploration is recommended in any woman presenting with chronic pain after one of these products has been used. We would re-iterate the importance of following the manufactures instructions, especially thorough lavage.

A Review Of Clinical Practice In The Diagnostic Accuracy Of Magnetic Resonance Imaging (MRI) For Investigating A Fibroid Uterus

Shamitha Kathurusinghe[1], Kasia Michalak[1], Deborah Neesham[2], Andrew Dobrotwir[3], Catarina Ang[1]

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

2. Oncology & Dysplasia, Royal Women's Hospital, Parkville, Victoria, Australia

3. Ultrasound Services, Royal Women's Hospital , Parkville, VIC, Australia

There is a growing momentum of research into the utilisation of MRI for the work up of a fibroid uterus. Following the controversy of uterine morcellation; International Society for Gynecologic Endoscopy (ISGE) recommend preoperative MRI imaging in high risk patients to exclude occult malignancy. Access to an in-hospital MRI service with radiologists specialised in gynaecological reporting has lead to increased application of MRI imaging at our institution. Diffusion weighted magnetic resonance imaging and quantitative measurement of apparent diffusion coefficient values are some imaging techniques used by our radiology service to differentiate a benign fibroid from malignancy.

We conducted a retrospective review from 2011-2013 of MRI pelvis scans performed to investigate a fibroid uterus. A total of 851 MRI's were reviewed following a hospital database search with 220 patients matching our inclusion criteria. Histopathological comparison was performed in 107 patients to confirm MRI diagnosis. Medical records were reviewed for 113 patients for any further diagnosis of malignancy in the absence of histopathology and a negative MRI. The median age was 43.2 years with 51 patients undergoing a hysterectomy following MRI. Uterine malignancy including an Leiomyosarcoma (LMS) was diagnosed in 5 patients. Eight patient were also diagnosed with a Smooth muscle tumour of unknown malignant potential (STUMP) or a benign fibroid variant. The sensitivity of MRI for diagnosing a uterine malignancy in the setting of fibroid uterus was 100% with specificity of 93.94 %. However, given the potential serious implications of morcellating a STUMP, the sensitivity of MRI diagnosis declined to 71%(95%CI: 29.04% to 96.33%) when STUMP was included.

Based on our review, we conclude that MRI imaging is a useful modality in the high risk patient with a fibroid uterus to exclude malignancy. However preoperative counselling should discuss the increased operative morbidity in the setting of false positive results. Based on our review, MRI has poor sensitivity in assessing STUMPs or benign fibroid variants. Therefore, the impact of misdiagnosis and morcellation in this setting should also form part of patient counselling. An ongoing audit is continuing to further appraise these initial findings.

Video Presentation

Uterine Rudimentary Horn In Young Female Presented With Severe Endometriosis, Bad Obstetric History And Agenesis Of Unilateral Kidney – A Case Report And Video Description Of The Laparoscopic Treatment

Lior Levy[1, 2], **Elad Berkowitz**[1, 2], **Moshe Bustan**[1, 2], **Shabtai Romano**[1, 2]

1. Obstetrics and Gynecology, Emek Medical Center, Afula, ISRAEL
2. Technion - Israel Institute of Technology, Haifa, ISRAEL

The unicornuate uterus is a result of an abnormal or failed development of one of the paired müllerian ducts. Non-communicating accessory uterine horns with an endometrial cavity are the most common and clinically significant unicornuate subtypes of Müllerian duct abnormality. They are generally associated with symptoms of dysmenorrhea, dyspareunia, infertility, endometriosis, adhesions, life-threatening corneal or rudimentary horn pregnancy, and anomalies of the urinary tract[1].
Pregnancies with a unicornuate uterus are considered high-risk for late abortions, preterm labor and placental abruption[1].
Here we present a video description of the laparoscopic management of a married, 28 Y\O woman with no kids, who suffered from abdominal pain, Dysmenorrhea, Dyspareunia, Dyschesia, and new diarrhea.
She was known to have an agenesis of Lt kidney.

Obstetrical history revealed an 18 weeks spontaneous abortion.
On Physical examination, there was a normal appearance cervix which was pulled to the left, normal sized uterus, cervical motion tenderness, tenderness on palpation of the rectovaginal septum and a lesion palpated on the left uterosacral ligament, suggesting deep endometriosis.

3D Ultrasound suggested "Right unicornuate uterus, with a suspected endometrium filled rudimentary horn sized 30X30 mm, without evidence of connection with the normal Horn. Bilateral ovarian cysts suggested endometriomas".
The woman underwent a laparoscopic surgery, which revealed a right unicornuate uterus, with non-communicating left rudimentary horn. In addition, spread, severe endometriosis including bilateral endometriomas, bilateral endometriosis lesions lying on the uterosacral ligaments, and multiple pelvic adhesions.

Surgical treatment included adhesionlysis, achieving mobility of the pelvic structures, endometriomectomy, dissection and laparoscopic removal of the rudimentary horn and the connected tube, (taking it out by morcillation), unveiling the ureters, achieving mobilization of the rectum, and removal of the lesions along the uterosacral ligament. Hemostasis and evaporation were done by Argon Plasma Coagulation system.

The woman had a rapid recovery, remained free of pain throughout her follow up.

The literature suggests the need to remove the rudimentary horn of a unicornuate uterus and supports the laparoscopic approach if such a decision is taken[2].

This woman represented with the classic complications of uniconuate uterus including severe endometriosis and related symptoms, second trimester abortion, and renal agenesis contralateral to the functioning uterus. Laparoscopic resection of the rudimentary horn is expected to reduce the possibility of extra-uterine pregnancy, to improve future pregnancy outcomes, and to reduce the further development of endometriosis[2].

1. Unicornuate uterus and rudimentary horn. Heinonen PK. Fertil Steril. 1997 Aug;68(2):224-30.

2. Diagnosis and laparoscopic management of a rudimentary uterine horn in a teenage girl, presenting with haematometra and severe endometriosis: our experience and review of literature. Liatsikos SA et al, Minim Invasive Ther Allied Technol. 2010 Aug;19(4):241-7

Reverse Hysterectomy: A Modified Technique For Laparoscopic Hysterectomy

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1. Epworth Hospital, Richmond, Victoria, Australia
2. The Womens', Parkville, Victoria
3. University of Melbourne, Melbourne, Victoria

Laparoscopic hysterectomy has become a widely accepted procedure and the first preference for many surgeons instead of an abdominal hysterectomy done via laparotomy. Several publications have demonstrated the benefits of this.

The procedure can be technically challenging. Factors that increase surgical difficulty and the potential for complications include very large uteri, the presence of severe endometriosis, previous caesarean sections and other operations that cause pelvic adhesions. Reported important complications include urinary tract injuries and haemorrhage.

The traditional technique for total laparoscopic hysterectomy follows the same main steps and sequence of the open procedure i.e., sealing of the round ligaments, sealing of the adnexal pedicles, opening of the broad ligaments, dissection of the bladder, sealing of the uterine arteries, colpotomy, removal of the specimen and colporrhaphy.

The "Reverse Hysterectomy" technique is proposed with the aim of reducing the risk of urinary tract injuries and bleeding. The surgical steps are performed essentially in reverse, starting distally at the cervix and then moving cranially i.e., incision to the peritoneum at the utero-vesical fold, dissection of the para-vesical and utero-vesical spaces, opening of the broad ligaments, sealing of the uterine arteries near their origin from the internal iliac artery, then sealing of the round ligaments and adnexal pedicles and lastly the colpotomy and removal of the specimen followed by colporrhaphy.

Results: We conducted an audit of 170 patients where a laparoscopic hysterectomy was performed using the "reverse technique".

All the operations were done for benign conditions: 56.4% fibroids, 38% menorrhagia, 16.8% pelvic pain (endometriosis or adenomyosis), 4.1% complex hyperplasia and one case (0.6%) for prophylactic reasons following breast cancer. Patient average age was 45 years (range 25 to 68). Average uterine weight was 243g (variation 43 to 1430g). Average blood loss was 100.4ml (variation 10-500ml).

There were no cases of bladder or ureteric injury, there were no returns to theatre and no patients required a blood transfusion post operatively.

Perceived advantages by the surgeon include better exposure of the anatomy, better control of the bladder dissection and more secure control of the blood vessels.

Conclusion: We believe this reverse approach is a safe and efficient way to perform a laparoscopic hysterectomy.
A video will be shown to illustrate the procedure.

1. Litta P, Saccardi C, Conte L, Florio P. "Reverse Hysterectomy: Another Technique for Performing a Laparoscopic Hysterectomy" Journal of Minimally Invasive Surgery, Vol 20(5) 2013
2. Nezhat C1, Grace LA, Razavi GM, Mihailide C, Bamford H. "Reverse Vesicouterine Fold Dissection for Laparoscopic Hysterectomy After Prior Cesarean Deliveries" Obstetrics & Gynecology, Vol 128(3), p629-33 2016
3. Sinha R, Sundaram M, Nikam YA, Hegde A, Mahajan C. "Total laparoscopic hysterectomy with earlier uterine artery ligation" Journal of Minimally Invasive Gynecology. Vol 15 p355–359 2008

Video Presentation

Laparoscopic Morcellation - A Contained Approach To Fibroids

Emma C Paterson[1], Michael Wynn-Williams[1], Luke McLindon[1]

1. Mater Mother's Hospital, Hawthorne, QLD, Australia

Laparoscopic power morcellation in the setting of myomectomy is discouraged, due to concerns over spreading tissue from an undiagnosed malignancy. Current data suggests approximately 1:1000 women undergoing a hysterectomy or myomectomy may have an undiagnosed uterine sarcoma. For the majority of patients this means, at best, they can expect a mini-laparotomy/extension of a port site to allow for specimen retrieval, and at worse, an open procedure with the associated increase in post-operative pain, hospital stay and recovery.

But what if there was a way to safely morcellate fibroids in a contained environment without incurring the risk of disseminating sarcomatous tissue?

This video presentation demonstrates two cases of laparoscopic myomectomy where the specimen is placed in a ripstop nylon bag with a polyurethane coating (Espiner morcellation containment system) and safely morcellated prior to removal. This is a purpose designed bag which allows morcellation under direct vision with a custom designed camera sleeve. This approach enables myomectomy to be performed entirely laparoscopically, thereby maximising patient safety,recovery and satisfaction with associated cost savings in health care resources.

1. Jin C, Hu Y, Chen XC et al. Laparoscopic versus open myomectomy- a meta-analysis of randomized controlled trials. Eur J Obstst Gynecol Reprod Biol, 2009;145(1):14
2. AGES Statement: C-Gyn 33: Tissue Extraction at Minimally Invasive Procedures. AGES 2014

Video Presentation

Laparoscopic Wedge Resection Of The Uterus For The Management Of A Left Interstitial Ectopic Pregnancy

Carolin Poon[1], Janine Manwaring[1], Prathima Chowdary[1]

1. Mercy Hospital for Women, Heidelberg, Victoria, Australia

Background: An ectopic pregnancy is a pregnancy that develops outside the uterus. They most commonly occur in the tube, but can also occur in the interstitial portion of the fallopian tube, the ovary, cervix, caesarean section scar and the abdomen.

An interstitial pregnancy makes up 2-4% of ectopic pregnancies.[1] The interstitial portion of the fallopian tube refers to the proximal portion where it implants into the muscular wall of the uterus. Pregnancies that implant in this area can be difficult to diagnose on ultrasound, as they can be misdiagnosed as an eccentrically placed intrauterine pregnancy. Due to the difficulty in diagnosis and the rich vascular supply of the cornua, interstitial ectopic pregnancies are associated with a relatively high rate of rupture and maternal mortality in the range of 2-2.5%.[2]

The management of interstitial ectopic pregnancies varies in the literature and may involve expectant, medical or surgical treatment or a combination of these. Surgical management may include cornuotomy (the pregnancy tissue is removed without removing the surrounding myometrium), cornual wedge resection (the pregnancy tissue and the surrounding uterine cornua are excised en bloc) or hysterectomy. The advantages of conservative surgical treatment with cornuotomy is that there is theoretically less disruption to the uterine architecture, which potentially preserves fertility and reduces risk of future uterine rupture.[3] The disadvantages of cornuotomy is that there may be an increased incidence of persistent and recurrent interstitial pregnancy.

Case: We present the case of a 29 year old G2P1 of ~6 weeks gestation, with a left interstitial ectopic pregnancy. She was initially managed with multi dose intra muscular methotrexate. Her bhCG increased day 5 and the decision was made to manage her surgically. The patient underwent a laparoscopy, left salpingectomy, and wedge resection of the uterus. We present video footage of this procedure.

Conclusion: We demonstrate how an interstitial pregnancy can be managed laparoscopically.

1. Tulandi T, Al-Jaroudi D. Interstitial pregnancy: results generated from the Society of Reproductive Surgeons Registry. Obstet Gynecol 2004; 103;47-50
2. Lau S, Tulandi T. Conservative medical and surgical management of interstitial ectopic pregnancy. Fertil Steril 1999; 72: 201-15
3. Liao CY, Tse J et al. Cornual wedge resection for interstitial pregnancy and post operative outcome. Aust NZJ Obstet Gynaecol 2016 July 25

Video Presentation

Endometriosis Of The Extra-Pelvic Round Ligament: A Case Report

Roni Ratner[1], Tom Manley[1], Haider Najjar[1], Jim Tsaltas[1]

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Endometriosis is generally confined to the pelvic peritoneal cavity. Endometriosis in the inguinal region is rare and in 90% of patients occurs on the right side. We present a video of such a case in a well 27 year old nulliparous woman who presented with dysmenorrhoea, dyschezia, dyspareunia and a painful right groin lump exacerbated by menses. Worsening pain prompted investigation with MRI, which suggested an endometrioma closely associated to the right round ligament. Further imaging with a COGU ultrasound suggested an endometriotic nodule in the right inguinal region. The patient underwent laparoscopic excision of her intrapelvic endometriosis and an open excision of her right extra-pelvic round ligament endometriotic nodule.

1. Sun ZJ, Zhu L, Lang JH. A rare extrapelvic endometriosis: inguinal endometriosis. J Reprod Med. 2010;55:2-3

Endometriosis: An 8 Year Retrospective Analysis On The Surgical Outcomes And Complications In A Large Multicentre Unit In Melbourne

Roni Ratner[1], Jim Tsaltas[1], Amani Harris[1], Cameron Sharp[1], Haider Najjar[1], Oshri Barel[1]

1. Gynaecology Endoscopy Unit, Monash Health, Melbourne, Victoria, Australia

Background: Endometriosis is a chronic, inflammatory condition caused by deposits of endometrium-like tissue outside the uterus. Estimates of prevalence are between 2-10% of the female population and in up to 50% of women who have fertility issues.[1] The most recent ESHRE guidelines outlining the management of endometriosis, advise that when diagnosed on laparoscopy, clinicians are recommended to treat endometriosis and that excision of lesions is preferred. Surgery for deep lesions is effective but has a higher complication rate.

Aim: The objective of this study was to assess the surgical outcomes and complication rates of endometriosis related surgery over an 8-year period.

Method: This was a multicentre retrospective study following women who underwent endometriosis surgery at Monash Health between the years of 2009 and 2016. Follow up data was collected to evaluate success of surgery based on reporting of pain and repeat surgeries.

Results: 3034 patients presented with endometriosis to Monash Health during this time period. Of these 2150 patients underwent surgical treatment, 670 patients had sufficient data in their computerised records and were included in the analysis. 424 (63.3%) of patients had stage 1 or 2 endometriosis, 239 (35.6%) had stage 3 or 4 endometriosis and 7 (1%) were unclassified or had adenomyosis only. In regards to surgical outcomes, conversion to laparotomy (7 vs 2 p=0.009), complication rate (17 vs 7 p=0.001), average time to discharge (1.9 vs 1.3 days p<0.001) and average operating time (113.4 vs 78.6 minutes) were all significantly higher in the Stage 3 and 4 endometriosis group. Patients with Stage 3 and 4 endometriosis had significantly more symptom resolution or improvement following surgical treatment (109/148 vs 123/204 p=0.01).

Discussion: The findings from this study reinforces that surgical treatment is effective for patients with severe endometriosis. Complication rates, operating time and length of stay in this series of patients were related to the severity of the endometriosis.

1. Dunselman GAJ et al. ESHRE guideline: management of women with endometriosis. Hum Reprod. 2014;29:400–412

Ultrasound Based Endometriosis Staging System (UBESS) To Predict Complexity Of Laparoscopic Surgery Using AGES Laparoscopic Skill Levels

Jessica Tompsett[1], Bassem Gerges[1], Shannon Reid[2], Tim Chang [2], George Condous [1, 3]

1. Sydney Medical School Nepean, University of Sydney , Sydney , NSW , Australia

2. LaSGeG , Sydney, NSW, Australia

3. Acute Gynaecology, Early Pregnancy and Advanced Endoscopic Surgery Unit, Nepean Hospital, Sydney, NSW, Australia

Objective: To validate a pre-operative ultrasound based endometriosis staging system (UBESS) for predicting the Australasian gynaecological and endoscopic society (AGES) level of laparoscopic skill level required for endometriosis surgery.

Methods: Multicentre study of consecutive women presenting with chronic pelvic pain from August 2013 to April 2016. All women with symptoms of chronic pelvic pain +/- history of endometriosis underwent a detailed specialized transvaginal ultrasound (TVS) in a tertiary referral unit to stage the endometriosis prior to laparoscopy using the three stage UBESS system. The findings from UBESS were correlated with surgical gold standard. The UBESS stages were correlated with the AGES laparoscopic skill levels: UBESS Stage I predicted AGES skills level I/II, UBESS stage II predicted AGES skills level III/IV and UBESS stage 3 predicted AGES skill level VI. AGES V was not included as it pertains to total laparoscopic hysterectomy/myomectomy.

Results: 155 consecutive women were included in the analysis. The mean age at diagnosis was 32.7 years, with a mean symptom duration of 29.7 months. The accuracy, sensitivity, specificity, PPV, NPV, LR+, LR- of UBESS stages I, II and III to predict the AGES laparoscopic skill levels were 84.5%%/82.3%/86.8%/86.7%/82.5%/6.3/0.204, 81.3%/71.4%/84.2%/56.8%/91.0%/4.5/0.339 and 90.3%/75.6%/95.6%/86.1%/91.6%/17.2/0.255, respectively. The rate of correctly predicting the exact level of skills needed is 79.5%, and Cohan's kappa statistic for the agreement between UBESS prediction and levels of training required at surgery is 0.69, indicating a substantial agreement.

Conclusions: UBESS could be utilized to predict the level of complexity of laparoscopic surgery for endometriosis. It has the potential to facilitate the triage of women with suspected endometriosis to the most appropriate surgical expertise

required for laparoscopic endometriosis surgery. UBESS needs to be validated externally in multiple centres to assess its general applicability.

Session Eight C: Interactive Hubs 4

1400-1500

Maritime Ballroom & Foyer

Trade Exhibition

By registration only.

Session Nine: Keynote Presentations

1600-1700

Grand Ballroom 2

The Perpetual Dan O'connor Lecture

John Maxwell Pardey[1]

1. Nepean Hospital, Kingswood, NSW, Australia

Abstract not yet provided.

Clash Of The Titans - Combatants: Anusch Yazdani Vs Jason Abbott

Anusch Yazdani[1], **Jason Abbott**[2]

1. Eve Health, Brisbane, QLD, Australia
2. Alana Healthcare For Women, Randwick, NSW

Endometriosis and IVF...
Who should have a laparoscopy?
Who should do the laparoscopy?
Who benefits from the laparoscopy?

Saturday 4 March

Breakfast Session: Humpty Dumpy Sat On A Wall: Avoiding The Fall When Taking Up A New Procedure/Device

0700-0755

Heritage 1

Session Ten A: Breaking Down Myomectomy

0800-0930

Grand Ballroom 1

This session focuses on all things fibroid, from the basic to the advanced myomectomy, and how to hide the evidence afterwards – if you choose to operate at all…

Step-By-Step: Laparoscopic Myomectomy Made Simple

Alan Lam[1]

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

Laparoscopic myomectomy, one of the most commonly performed and satisfying minimally invasive procedures, may also be one of the most challenging, frustrating procedures for laparoscopic surgeons, and risky for women seeking surgical removal of fibroids.

In this presentation, the presenter draws on his extensive years of experience and published evidence in formulating step-by-step guide as to how to make laparoscopic myomectomy simple, predictable and safe. The essential steps include (but are not confined to):

- Patient selection and counselling
- Pre-operative preparation
- Haemostatic techniques
- Energy selection
- Incision techniques
- Enucleation instruments and techniques
- Suture selection and techniques
- Adhesion prevention
- Tissue retrieval techniques
- Post-operative review

1. Mohammed Agdi, Togas Tulandi*. Endoscopic management of uterine fibroids. Best Practice & Research Clinical Obstetrics and Gynaecology Vol. 22, No. 4, pp. 707–716, 2008.
2. Ton R et al. A Medical-legal review of power morcellation in the face of recent FDA warning and litigation. JMIG 2015; 22:564-572.
3. Jin C, Hu Y, Chen XC, et al. Laparoscopic versus open myomectomy: a meta-analysis of randomized controlled trials. Eur J Obstet Gynecol Reprod Biol. 2009;145:14–21.

The Large Fibroid: Laparoscopy Or Laparotomy?

Sarah Choi[1]

1. Sydney Women's Endosurgery Centre SWEC; Complex Pelvic Surgery Unit, Liverpool Hospital, Chatswood, NSW, Australia

Abstract not yet provided.

Challenging Fibroids: Adenomyoma. Deep Intramural, Broad Ligament, Cervical And "The Bag Of Marbles"

Haider Najjar[1]

1. Monash Health, Mount Waverley, VIC, Australia

Abstract not yet provided.

Options For Fibroid Removal At Laparoscopic Myomectomy

Yogesh Nikam[1]

1. AEVAFEM Pty Ltd, Glenwood, NSW, Australia

Abstract not yet provided.

Non-Surgical Management Of Fibroids

Luice Wang[1]

1. Nepean Hospital, Kingswood, NSW, Australia

Fibroids are benign tumours of the uterus which can occur in up to 50% of women. The prevalence of leiomyomas increases with age during the reproductive years. Most, but not all, women have shrinkage of leiomyomas after menopause. Since histologic confirmation of the clinical diagnosis is not necessary in most cases, and there is both growth and regression of fibroids, asymptomatic uterine leiomyomas can usually be followed without intervention.

For those requiring treatment for their symptoms – heavy menstrual bleeding, pelvic pain, bulk related pressure symptoms, both surgical and non-surgical methods have shown good effect. In this talk, we focus on the non-surgical treatment of fibroids, including well known methods such as oral contraceptive pill, IUD, GnRH agonists, and Danazol, as well as new generation of medical therapy, such as selective progesterone receptor modulators. The pros and cons of each of these therapies will be discussed.

Session Ten B: Breaking Down Endometriosis

0800-0930

Grand Ballroom 2

An in-depth look at endometriosis, from diagnosis to medical and surgical treatments for women of all reproductive ages. What do you do when you you're not sure what to do, or not do, at diagnostic laparoscopy. Even more perplexing, what you do when your operative laparoscopy hasn't helped your patient.

"Recognising The Chameleon" Is The Key To Avoiding Inadequate Surgical Treatment Of Endometriosis

Christopher Smith[1]

1. North Shore Private Hospital, Roseville, NSW, Australia

This presentation focuses on the surgical recognition of endometriosis. Awareness of the large variation in appearance of endometriotic lesions is key to the diagnosis and treatment of this condition. A complete and systematic inspection of the abdomen and pelvis for endometriosis should always be performed at laparoscopy. Peritoneal endometriosis matures through a series of well-described stages, and the ability to consistently recognise these lesions as endometriosis will vary with the experience of the surgeon. This presentation will discuss these lesions in detail, while also providing laparoscopic examples. It will also outline the underlying histopathological changes, as well as highlight some of the less common presentations of endometriosis seen at laparoscopy. Of course, the diagnosis of endometriosis is definitively made by histological assessment of excisional biopsies. But this process is only possible if the surgeon has adequate training in the visual recognition of endometriotic lesions. Even then, experienced surgeons have been found to correctly identify lesions with confirmed endometriosis 64% of the time. We therefore need to improve the laparoscopic recognition of endometriosis if best surgical outcomes for our patients are to be achieved.

Step-By-Step: Surgical Management Of Endometriosis - The Easy And The Not So Easy

Kenneth Law[1]

1. Greenslopes Obstetrics and Gynaecology, Greenslopes, QLD, Australia

Abstract not yet provided.

Management Of The Teenager With Incapacitating Pelvic Pain

Rebecca Deans

Abstract not yet provided.

"Peek & Shriek" Or "Soldier On"? Options When Faced With The Unexpected Finding Of Severe Endometriosis

Harry Merkur

Unexpected severe endometriosis – There are a number of scenarios by which this can occur, for example:

1. Surgery is being performed for another indication and coincidental severe endometriosis is found
2. Surgery is being performed when the diagnosis has not been entertained preoperatively
3. Where the clinical findings and imaging modalities used have not made the diagnosis before surgery

Faced with unexpected severe endometriosis what responses may occur:

1. Press on if the surgeon has the necessary skill set
2. Call for help
3. Recognise one's limitations and do what is safe in your hands
4. Use the procedure as a staging exercise and do not perform unconsented surgery
5. Convert to laparotomy

When severe endometriosis is suspected preoperatively, what is the appropriate response:

1. Operate if you have the necessary skills
2. Collaberate and have an experienced "buddy" with you if you are going to operate on this patient
3. Have close relationship with colo-rectal surgeon
4. Consider referral if beyond your capability

When Surgery Fails... Contemporary Non-Surgical Options For Persistent Pelvic Pain

Thierry Vancaillie[1]

1. Women's Health & Research Institute of Australia, Sydney, NSW, Australia

Abstract not yet provided.

Session Eleven: Regulations In O&G Surgery: A Foregone Conclusion

1000- 1200

Grand Ballroom 2

Whether we like it or not, hospital monitoring of surgical outcomes and determination of a surgeon's scope of clinical practice and is with us to stay. This session focuses on the concept of "surgical excellence" in Australia or overseas and whether this goal this is attainable or just a pipe dream.

Surgical Self-Preservation: How Should We Gauge Surgical Outcomes?

Emma Readman[1]

1. Mercy Hospital for Women, Clifton Hill, VIC, Australia

Abstract not yet provided.

"Near Misses": Beyond Surgical Morbidity And Mortality

Russell Hogg[1]

1. Royal North Shore Hospital, St Leonards, NSW, Australia

Abstract not yet provided.

"Who, How And Why?": The Challenges Of Credentialing In The USA

Jon Einarsson[1]

1. AAGL, Cypress, CA, United States

The lecture will describe the current method of operating room credentialing in the USA for gynecologic surgeons. The limitation of the current system will be discussed as well as avenues that are currently being explored for remediation.

Training The Trainee And Consultant: The NHS Perspective

Justin Clark[1]

1. Birmingham Women's Hospital, Birmingham, United Kingdom

"The more I practice the luckier I get" or so the infamous Arnold Palmer quote goes. Exposure and experience are key to attaining proficiency in any craft skill and let's be honest, most trainees are desperately keen to be taught how to operate. Yet, the during junior doctor training, the demands of obstetrics and the more mundane gynaecological pursuits throttle the time, enthusiasm and ultimately the capability of the aspiring trainee gynaecological surgeon.

Many general surgical maxims remain relevant to gynaecological endoscopic surgery - exposure, dexterity and a good understanding of anatomy for example. However, hand: eye co-ordination and an intuitive awareness of space are arguably more important to those holding an endoscope. Training and practice in surgical techniques can improve proficiency but shouldn't we be aiming to identify those trainees with more natural ability and focus our efforts upon them? Many trainees will have insight into their innate abilities and choose the branch of obstetrics and gynaecology that best suits their talents. However, a substantial minority do not. Evidence supports the use of low and high fidelity simulation including virtual reality simulation to reduce the learning curve for attaining some of the skills fundamental to endoscopic procedures. Selection of the best trainees for gynaecological surgery, which inevitably means endoscopic surgery in the 21st century, should be rethought and include the results of performance on training simulators. Modern trainee rotas, with their emphasis on obstetric practice couples with the restrictions placed upon trainees time by legal working time directives, hinder the acquisition of higher level endoscopic skills. Radical change is needed and the perpetuation of combined obstetric and gynaecological practice within hospitals within major conurbations needs to be rethought if we are to maximise the expertise of practitioners.

Regarding the system adopted in the National Health Service (NHS), a minimum of nine years training is required before a Consultant post can be attained. Only within the last two years of training can trainees undertake Royal College of Obstetricians and Gynaecologists (RCOG) Advanced Specialist Training Modules (ATSMs) so that they can focus their training upon gynaecological endoscopy. For the exceptional trainee, there are five ATSMs available nationally in "Advanced Laparoscopic Surgery for Excision of Benign Disease" which mainly focuses on training within a British Society of Gynaecological Endoscopy (BSGE) recognised Endometriosis Surgery Centre. Other opportunities for the aspiring gynaecological endoscopist include Fellowships within individual Centres of Excellence, undertaking a higher degree (Masters – MSc) in Advanced Gynaecological Endoscopy training (University of Surrey) and competitive application (through the BSGE) for 48 places on industry sponsored laparoscopic courses. More uniform and focussed training to those with demonstrable aptitude is needed in gynaecological endoscopy within the NHS and beyond.

Clinical Excellence And Surgery

Karen Luxford[1]

1. Clinical Excellence Commission, Sydney, NSW, Australia

Abstract not yet provided.

Beyond "Number Of Cases": Redefining Gynaecological Surgery Training

Stephen Robson[1]

1. RANZCOG, Melbourne, Victoria, Australia

Abstract not yet provided.

"There's No Time Like The Present": Shared-Decision Making And Patient-Centred Care

Kristen Matteson[1]

1. Division of Research for the Department of Obstetrics and Gynecology, Warren Alpert Medical School, Brown University, Providence, USA

This session focuses on regulation in O&G surgery and the presentations are intended to be of interest for the generalist gynaecologist as well as the advanced laparoscopic surgeon. The focus of this talk is the future of patient care (with a focus on surgical management) and embracing both evidence based medicine and patient-centred care. This talk will cover the concepts of patient-centered care, shared-decision making, and evidence-based medicine. A discussion of how these are complementary rather than contradictory approaches to patient care will be presented as well as how surgeons can best respond to this evolution of healthcare delivery

Session Twelve: Interactive Panel Session

1200- 1300

Grand Ballroom 2

Digital Free Communication

Working Hours, Roster Patterns And Fatigue Of Obstetrics And Gynaecology Trainees In Australia And New Zealand

Jade Acton[1], **Paul Cohen1, Paige Tucker1**

1. SJOG Subiaco, Subiaco, WA, Australia

Background: The importance of doctors' working hours has gained significant attention with evidence suggesting long hours and fatigue may compromise the safety and wellbeing of both patients and doctors. This study aims to quantify the working hours, rostering structure and fatigue levels of The Royal Australian and New Zealand College of Obstetrics and Gynaecology (RANZCOG) specialist trainees in order to better inform discussions of working hours and safety within our region.

Methods: An anonymous, online survey of RANZCOG trainees was conducted. Demographic data collected included: age, gender, level of training and current rotation. The primary outcomes were: hours per week at work and hours per week on-call. Secondary outcomes included the frequency of long-days (>12 hours) and 24-hour shifts, time spent studying, staff shortages and opinions regarding current rostering.

Results: Response rate was 49.5% (n=259). Fulltime trainees worked an average of 53.1±10.0 hours/week, with 11.6% working on call. Long-day shifts were reported by 85.8% of respondents, with an average length of 14.2 hours. 15% reported working 24-hour shifts, with a median duration of uninterrupted sleep during this shift being 1-2 hours. Trainees in New Zealand worked 7.0 hours/week more than Australian trainees (p=<0.001), but reported less on call (p=0.021). Trainees in Western Australia were more likely to work on call (p=<0.001) and 24-hour shifts (p=<0.001).

A majority (72.9%) of respondents regularly felt fatigued, with higher fatigue levels being associated with more hours worked per week (p=<0.001) and working long shifts (>12 hours) (p=0.007). Fatigue was associated with an increased risk of dozing while driving (p=0.028), with 56.1% of respondents reporting that this occurs. Trainees appeared to be less confident in achieving their technical skill requirements, with increasing hours not increasing confidence in achieving these skills (p=0.594). Trainees who worked under 50 hours per week were less likely to report fatigue (p=<0.001) and more likely to report greater work enjoyment (p=0.043), and working hours being conducive to learning (p=0.015).

Conclusion: While 53.1 hours/week at work is similar to the average Australian hospital doctor, high rates of long days and 24-hour shifts with minimal sleep were reported by RANZCOG trainees in this survey. Fatigue was frequently reported by RANZCOG trainees with increased working hours and long shifts being significant factors in fatigue levels. Strategies should be developed and trialled to enable trainees to obtain adequate case exposure and teaching without compromising patient and doctor safety.

A Surprise Diagnosis Of An Ectopic Complete Molar Pregnancy: The Importance Of Surgical Management In Ectopic Pregnancies

Dimity Archer[1], **Kate Mitchell**[1]

1. Obstetrics and Gynaecology, Tasmanian Health Organisation- South, Hobart, Tasmania, Australia

Introduction: Tubal hydatidiform molar pregnancies are extremely rare, with only 132 cases quoted in the literature (1). In a classic molar intrauterine pregnancy there are typical radiological and biochemical features that make the clinician more likely to diagnose molar pregnancy pre-operatively. In an ectopic pregnancy these are less likely to be present, as the symptoms of ectopic pregnancy usually present at an earlier gestation. (2) The diagnosis of an ectopic molar pregnancy relies on histopathology, which can only be gained surgically. It is paramount to make this diagnosis, as it has implications for post-operative follow up and a risk of malignant trophoblastic disease.

Case report: We present a case of a 33 year old woman, gravida three para one, seven weeks since her last menstrual period, who presented with a three day history of vaginal bleeding and mild pelvic pain. On examination she was haemodynamically stable and had no evidence of peritonism, and her beta HCG at the time was 1540 IU/L. Ultrasonography showed a right adnexal complex thick mass measuring 50mm, containing a 20mm gestational sac. No intrauterine gestational sac was visualised, and there was a small amount of free fluid in the pelvis.

Due to the ultrasound findings of free fluid and the large size of the mass, she was consented for surgical management. The operative findings were of a ruptured right ectopic pregnancy and the patient underwent an uncomplicated laparoscopic right salpingectomy. The tissue was sent for histopathology, which diagnosed a ruptured ectopic complete hydatidiform molar pregnancy. She was followed up with weekly beta HCG levels, which quickly became negative, and will be regularly reviewed, with monthly beta HCG levels for the following six months, in keeping with the local molar pregnancy protocol.
Conclusion: Tubal ectopic gestational trophoblastic disease occurs uncommonly. These cases can be challenging to

diagnose clinically or radiologically, and often the diagnosis is only made on histological examination of the tissue removed at surgery (3). Had the patient described in the case above not undergone surgical management, it is likely her diagnosis may not have been made, increasing the risk of developing malignant gestational trophoblastic disease.

1. 1. 1. Sebire NJ, Lindsay I, Fisher RA, Savage P, Secki MJ, Overdiagnosis of complete and partial hydatidiform mole in tubal ectopic pregnancies. Int J Gynecol Pathol. 2005:24(3): 260-64
2. 2. Ory S. New Options for Diagnosis and treatment of Ectopic Pregnancy. JAMA 1992;267:534-537
3. 3. Borah T. Raphael V. Panda S. Saharia P. Ectopic Molar Pregnancy: A Rare Entity. J Reprod Infert. 2010;11(3):201-3

Case Review And A Toolkit For Managing Laparoscopic Port-Site Bleeding

Kiran Atmuri[1], Angelika Borozdina[1]

1. Bendigo Hospital, Bendigo North, VIC, Australia

Laparoscopic port-site bleeding complicates up to 2% of laparoscopic surgery and is associated with significant morbidity [1]. The anatomical landmarks that allow safe port-site insertion is becoming difficult in an increasingly obese population. This presentation introduces three case studies and discusses techniques to prevent and manage laparoscopic port-site bleeding, providing a toolkit for laparoscopic gynaecologists.

The first case is a post-operative diagnosis of lateral port-site bleeding requiring blood transfusion that was managed with a partial thickness abdominal wall suture ligature. The second case is one of umbilical port-site bleeding that was managed with a return to theatre for wound exploration and packing with an absorbable haemostat. The final case is an intra-operative diagnosis of a deep inferior epigastric artery injury that was managed with a full thickness abdominal wall suture ligature using a suture passer.

Various techniques to prevent port-site bleeding will be discussed, such as attention to anterior abdominal wall vascular supply, trocar selection, angle of trocar insertion in the obese, transillumination and insertion of trocars under vision. Management techniques are based on intra-operative or post-operative diagnosis, and the toolkit to manage port-site bleeding includes lateral compression of ports by torquing the trocar, digital compression, Foley catheter compression, electrocoagulation, full and partial thickness abdominal wall suture ligature and packing the wounds with absorbable haemostats.

1. Karthik, S., Augustine, A.J., Shibumon, M.M. and Pai, M.V. (2013) Analysis of laparoscopic port site complications: A descriptive study. J Minim Access Surg. 9(2): 59–64.

The Use Of Ureteric Stents In Complex Gynaecology Surgery: A Retrospective Study

Adeline Chan[1], TImothy Chang[1]

1. Campbelltown Hospital, Campbelltown, NSW, Australia

Introduction: Use of ureteric catheters remain controversial in routine gynaecological cases. Complex gynaecological surgical conditions such as deep infiltrating endometriosis(DIE), residual ovary syndrome or previous pelvic surgery may result in higher complications, due to distorted anatomy and absence of normal cleavage planes, especially ureteric injury. A possible method of decreasing ureteric injuries may be the use of ureteric catheters, either inserted preoperatively or intraoperatively.. In this study, we review the outcome of using ureteric catheters by a single surgeon in complex gynaecological surgery over a period of 15 years.

Method: A retrospective study was performed, with data collected from an electronic patient database from Campbelltown Private and Campbelltown Public Hospital between the years of 2001 – 2016. Patients included in the study were those undergoing complex gynaecological surgery with ureteric catheter insertion, including both preoperative and intraoperative insertion.

Results: A total of 154 surgeries were included in this study. Two types of catheters were used during this period, the normal ureteric catheters and the illuminated ureteric stents. The mean average age was 45.56 years old with an average operating time per case of 117.25 minutes. 123 (79.8%) of patients have had previous pelvic surgeries in the past. There were 129 ureteric catheters inserted preoperatively, and 23 intraoperatively with 2 (1.2%) failed insertion. There were no reported ureteric injuries in the 154 surgeries during this period.

Conclusions: Insertion of ureteric catheters is a technique, which is easily learnt and be performed by a gynaecologist. It is worthwhile considering preoperative ureteric catheter insertions for complex pelvic surgery cases who maybe at higher risk of ureteric injury.

1. 1. Jay A. Redan et al. Protect the Ureters. Journal of the Society of Laparoendoscopic Surgeons (JSLS) 2009 13:139-141
2. 2. Anita J Merritt et al. Archives of Gynaecology and Obstetrics 2013 288 (5) : 1061-1066

Endometriosis Surgery In Patients With High Body Mass Index, A Retrospective Cohort Study

Alexander Chen[1], Amani Harris1, Jim Tsaltas1, Haider Najjar, Roni Ratner1, Tiarna Ernst1, Cameron Sharp1, Tristan McCaughey1, Hugh O'Connor1, Oshri Barel1

1. Monash Health, Clayton, VIC, Australia

Introduction: Current evidence suggests body mass index (BMI) is inversely correlated to presence and severity of endometriosis(1). The evidence regarding BMI and pelvic surgery is conflicting. Some studies have noted increased BMI to be a risk factor for conversion to laparotomy, and overall longer surgery and hospital stays(2). Other studies found that there is no difference between surgical outcomes or complications(3).
The aim of the current study was to evaluate the effect of high BMI on the surgical outcomes of patients undergoing operative laparoscopy for endometriosis.

Methods: We conducted a retrospective study investigating the effect high BMI (≥30) or normal BMI (<30) had on surgical complications, operating time, and duration of stay. Study population included all patients who had operative treatment of endometriosis between July 1st 2009 and June 31st 2016 at Monash Health.

Results: 636 patients had complete data in their computerized records and were included in the analysis. The median age of the patients was 34 years (15-64, SD 8.7). The average BMI in our patient population was 25.9 (13.2-52.1, SD 6). 138 patients had a BMI ≥30 (21.7%). 498 patients had BMI <30 (78.3%).

We did not find a significant impact of BMI on the stage of endometriosis in our study population. The main indication for surgery in both groups was pain (BMI ≥30: 81.7%, BMI <30: 77.5%). Obese patients tended to have more chronic pain (16.6% vs 11%) however, this was not statistically significant (p=0.07). Low BMI patients had infertility as a more frequent indication for surgery than obese patients (20.1% vs 10.1%, p = 0.008).

Both groups had similar complication rates (2.2% for obese patients vs 2.8%) including both major or minor complications. Obese patients had an increased conversion to laparotomy rate (2.1% vs 0.6%), however, this was not statistically significant (p=0.1). We also did not find a difference in operating time between the two groups. Length of stay was significantly longer for patients with BMI ≥30 compared to BMI <30 (1.7 vs 1.3 days, p=0.03).

Conclusion: Our study, consistent with current literature, found that endometriosis is more prevalent in the BMI <30 group(1). Women with BMI ≥30 had significantly longer lengths of stay. Interestingly, we found that there was no difference in operating time or complication rates in women with BMI ≥30. This suggests that performing laparoscopic endometriosis surgery on obese patients is as safe as in the general population.

1. Shah DK, Correia KF, Vitonis AF, Missmer SA. Body size and endometriosis: results from 20 years of follow-up within the Nurses' Health Study II prospective cohort. Human Reproduction (Oxford, England). 2013;28(7):1783-92.
2. Thomas D, Ikeda M, Deepika K, Medina C, Takacs P. Laparoscopic management of benign adnexal mass in obese women. Journal of Minimally Invasive Gynecology. 2006;13(4):311-4.
3. Camanni M, Bonino L, Delpiano EM, Migliaretti G, Berchialla P, Deltetto F. Laparoscopy and Body Mass Index: Feasibility and Outcome in Obese Patients Treated for Gynecologic Diseases. Journal of Minimally Invasive Gynecology. 2010;17(5):576-82.

Endometriosis, Ureteral Duplication, And Gender Reassignment: How Does It All Fit?

Sarah Fitzgibbon[1], Simon Edmonds[1]

1. Obstetrics and Gynaecology, Counties Manukau District Health Board, Auckland, New Zealand

Introduction: This is a case that illustrates possible associations between gynaecological pathology and the use of male hormonal treatment in the transsexual population. It also highlights the link between endometriosis, a common gynaecological condition, and embryological abnormalities of the Mullerian and Wollfian ducts.

Case Description: We present a case of a 25 yr old transgender male that presents requesting hysterectomy to complete their gender reassignment. The patient also reports new onset cyclical pelvic pain, dyspareunia, and dyschezia despite being amenorrhoeic on testosterone treatment. Endometriosis is identified at surgery and an incidental finding of a right sided double ureter is made. Pelvic clearance is performed and treatment is complete.

Discussion: The prevalence of transexualism continues to increase in our society making presentations for gynaecological pathology in the setting of male hormone use and requests for gender reassignment increasingly more common[1].

In the above case we have a patient who presented with endometriosis whilst on testosterone hormone replacement therapy. Endometriosis is generally considered an oestrogen dependent disease. Testosterone has a complicated and yet undefined role in its pathogenesis due to multiple interactions including hormone and hormone receptor levels, and the conversion of androgens via aromatisation to oestrogen [2]. Historically high dose testosterone derivates have been used in the treatment of endometriosis. However when we consider the process of aromatisation with testosterone being

converted to oestrogen, this does give rise to the possibility that testosterone could play a causative or at least perpetuating role in the disease process under certain conditions.

Ureteral duplication is a common embryological anomaly of the renal tract occurring in approximately 1% of the population [3]. Whilst incomplete duplications are rarely significant complete duplications can be associated with vesico-ureteric reflux and subsequent renal scarring. With a well-established link between Mullerian tract abnormalities and endometriosis, as its embryological counterpart we assess the evidence for an association between endometriosis and the Wollfian duct anomalies.

1. Veale FJ. The prevalence of transsexualism among New Zealand passport holders. The Australian and New Zealand Journal of Psychiatry. 2008 Oct; 42(10): 887-889.
2. Evsen MS. Sak ME. Soydince HE. Guven S. Basaranoglu S. Hatipoglu NK. Evliyaoglu O. Gul T. Serum levels of androgens and prostate-specific antigen in endometriosis. Clinical and Experimental Obstetrics and Gynaecology. 2014; 41(4): 432-435.
3. Mishra V. Barua MP. Embryological, radiological and surgical perspects of duplicated ureter with bilateral aberrant renal arteries – A case report. Indian Journal of Clinical Anatomy and Physiology. October 2014; 1(1): 60-63.

Total Laparoscopic Hysterectomy In 3 Easy And Safe Steps With Alan Vaginal Manipulator

Alan Freeman[1]

1. Even Women's Health, Brisbane, QLD, Auatralia

Laparoscopic hysterectomy has some benefits such as less morbidity, quicker recovery, less post-operative pain, etc. compared to abdominal hysterectomy (1). However total laparoscopic hysterectomy (TLH) can be challenging. Therefore, it is important to have a uterine manipulator that can assist doing this challenging operation in an easier and safer way.

It was shown that TLH can be carried out in 3 easy and safe steps with Alan (previously known as Titiz) utero-vaginal manipulator that has uterine and vaginal components (2). Also there are following advantages when Alan utero-vaginal manipulator is used for TLHs: 1. Reduced operation time 2. Reduced conversion to abdominal hysterectomy rate 3. Easier to use 4. Fewer bladder injuries 5. Fewer vaginal cuff infections 6. Ability to do a TLH for a bigger uterus (3).

However if a patient has a history of cervical surgery (e.g. conization or large loop excision of the transformation zone (LLETZ)), it may be difficult to grasp and dilate the cervix as the intra-vaginal portion of the cervix can be very short. The cervix can sometimes be completely flush with the vaginal wall. Also it is impossible to dilate cervix due to cervical stenosis in some cases. In all these cases, Alan vaginal manipulator (without uterine manipulator component) can be used to carry out TLHs. In addition, it may be possible to manipulate uterus in wider degrees when Alan vaginal manipulator (without uterine manipulator component) is used as there is no uterine manipulator in the uterine cavity.

This is a video presentation demonstrates how to do TLH in 3 easy and safe steps with Alan vaginal manipulator (without uterine manipulator component).

1. Nieboer TE. et al. Surgical approach to hysterectomy for benign gynaecological disease. Cochrane Database Syst Rev 2009:CD003677.
2. Titiz H (Freeman A). Total laparoscopic hysterectomy in 3 easy and safe steps with Titiz (Alan) utero-vaginal manipulator. J Minim Invasive Gynecol 2014; 21(6): S186.
3. Raymond S, Titiz H (Freeman A). Total laparoscopic hysterectomy: Single surgeon experience in a regional center after changing uterine manipulator and surgical technique. J Minim Invasive Gynecol 2015;22(6):S102.

"Endometriosis Does Not Exist In Tasmania"

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Endometriosis is a common condition affecting 3-10% of women of reproductive age and 40-80% of women with pelvic pain.[1] It results from the proliferation of endometrial tissue in the pelvis and extra pelvic sites. Clinically, it is a heterogenous disease with biopsychosocial components, and as such the diagnosis is often delayed and formulating an appropriate diagnostic workup and management plan can be challenging.[1,2] Despite its prevalence until recently the recognition and treatment of endometriosis has been suboptimal in the public sector of Tasmania.

Management of endometriosis is aimed at relieving symptoms, preventing disease progression and ameliorating infertility.[1] Approaches include surgical resection of disease, particularly in cases of infertility, and medical therapy. Given its prevalence, diagnostic and management challenges, multidisciplinary care delivered by clinicians who are skilled and specifically trained in its management is an essential component to providing holistic and appropriate care to women affected by endometriosis.

Traditionally in Tasmania the approach to managing endometriosis in the public sector has been ad hoc. Cursory diagnostic

laparoscopies without adequate exposure of anatomy to identify disease, a lack of histological diagnosis and the management of women with ovarian sparing hysterectomies without resection of disease has been not uncommon. Unfortunately patients often suffer from ongoing symptoms and develop chronic pelvic pain, posing a significant management and surgical challenge thereafter. Until recently there has been no coordinated approach to the management of endometriosis in Tasmania and diagnostic adjuncts such as endometriosis specific transvaginal sonography have not been available.

This paper details the rollout of the first multidisciplinary endometriosis team within Tasmania, implemented by a Gynaecologist with a special interest in the disease who undertook an AGES endoscopic fellowship interstate. In addition to this, as endometriosis is a complex disease with many biopsychosocial facets the reasoning and approach that have been undertaken to meet the needs of patients and their families holistically whilst maintaining the highest standards of clinical care will be discussed. Specifically, the rationale behind the need for an endometriosis team within the state, who comprises that team, the introduction of endometriosis ultrasonography to Tasmania and the ways in which we have addressed clinical governance within this model of care are also discussed. The Author's hope that the rationale and research that has gone into this manuscript may assist other specialists who wish to establish multidisciplinary teams for the management of endometriosis in their local area.

1. 1. Massimo M, et al. 2010. Endometriosis, need for a multidisciplinary clinical setting: the internists point of view. Intern Emerg Med. 5:463-467.

A Retrospective Study On The Outcomes And Efficacy Of The Manchester Procedure As A Uterine-Sparing Surgery For Uterovaginal Prolapse

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Introduction: More than 10 percent of women undergo surgical intervention for uterovaginal prolapse.[1] Vaginal hysterectomy has been the conventional surgical treatment, but it is associated with increased blood loss, morbidity, duration of surgery and postoperative recovery time.[1,2,3] It has also been proposed that the extensive pelvic floor dissection involved during hysterectomy may increase the risk of de novo urinary incontinence, bladder and sexual dysfunction. Various uterine sparing procedures have evolved for women who want to conserve the uterus.[1] The Manchester procedure is one such technique which involves amputation of the cervix, pelvic floor repair and trans fixation of the cervical stump to the cardinal ligaments.[1]

Materials and methods: A retrospective evaluation of women who underwent the Manchester procedure at our centre from November 2002 to July 2015 was done. The case notes were retrieved and the preoperative demographic parameters, grade of prolapse and intraoperative details were evaluated. The postoperative complications, recurrence of symptoms or prolapse on examination and pregnancy outcomes were also assessed.

Results: Fifty five women underwent the Manchester procedure during this time period. The average age and parity of the patients were 41.3 years and 2 respectively. Three (5.4%) were nulliparous, 4 (7.3%) were postmenopausal and 51 (92.7%) were sexually active. Four patients (7.3%) were keen for future fertility.

The average duration of the surgery was 46 minutes and the average blood loss was 31.8 ml. There were no intraoperative complications. Five patients (9.1%) had excessive bleeding per vaginum within 2 weeks of the procedure, of which 2 underwent examination under anaesthesia and 3 were managed conservatively. Four patients (7.3%) had voiding dysfunction postoperatively and required indwelling catheter for up to 2 weeks. Four patients (7.3%) conceived after the procedure, of which 2 underwent elective caesarean section at 36 weeks. One patient had an emergency caesarean section at 28 weeks for preterm premature rupture of membranes with transverse lie and the fourth patient underwent a termination of pregnancy at 10 weeks for unwanted pregnancy.

Twenty three out of 39 patients (59%) completed the 5 years of postoperative follow up. Two patients complained of occasional stress urinary incontinence on follow up and none had recurrence of prolapse on examination.

Conclusion: In view of its low complication and prolapse recurrence rates, the Manchester procedure could be considered in women with uterovaginal prolapse who want to conserve their uterus for various reasons.

A Case Of Hickam's Dictum

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A 46-year-old G2P2 female presented with severe abdominal pain worsening over a week. At presentation to another hospital a week earlier she had been treated for urinary retention and had an indwelling urinary catheter in-situ. Her history was significant for a LLETZ procedure 3 years ago and long-term Depo-Provera use, which had been ceased 8 months prior due to osteopaenia. She had been amenorrhoeic for 20 years as a result.

The patient was tachycardic to 120BPM and had a low-grade fever to 37.5°C. Examination revealed signs of peritonism and inflammatory markers were elevated with CRP 233 and white cell count 18.3. Pelvic ultrasound showed the uterus distended with 416ml of hyperechoic fluid. On this basis the presumptive diagnosis was haematometra due to cervical stenosis. The source of elevated inflammatory markers and low-grade fever was uncertain, as ascending infection through a stenosed cervix was unlikely. A decision was made for hysteroscopy with dilatation and curettage of the uterus +/- laparoscopy.

Prior to attending theatre, the patient reported passage of large amounts of dark discharge from the vagina. However, she continued to have abdominal pain with signs of peritonism so the procedure continued as planned. The cervix was easily dilated with no persisting stenosis and only a small amount of blood evacuating with no offensive odour. The uterine cavity was large, with small amounts of clot; the ostia could not be visualised laterally. Given the persistence of pain despite drainage of the haematometra, the difficulty in visualising the ostia and the unexplained elevated inflammatory markers, a decision was made to proceed to laparoscopy.

At laparoscopy the uterine anatomy was distorted, with the left adnexa rotated posteriorly and adherent along with the fundus to the pouch of Douglas. The right tube and ovary appeared normal. The appendix was inflamed, with significant exudate covering a gangrenous tip. The surgical registrar attended and performed an appendicectomy. Acute suppurative appendicitis was confirmed on histopathology.

The patient recovered well post-operatively. She was discharged home on day two.

Occam's Razor encourages us to pare away differential diagnoses until a single pathology fits all the signs and symptoms – in this case an infected haematometra. Occam's razor may have cut the surgeon had he not been aware of Hickam's Dictum, a counter-theory which states that "patients can have as many diseases as they damn well please". In this case, both a haematometra due to cervical stenosis and acute appendicitis.

Ulipristal Acetate: A Recently Approved Medical Treatment For Fibroids

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There is a lack of available long-term medical treatment options in Australia for women with symptomatic uterine fibroids, which remain one of the most common indications for hysterectomy. Ulipristal acetate (UPA) was registered for a single 3-month pre-operative course in the EU in 2012, Canada in 2013 and most recently in Australia in October 2016.

Gonadotropin releasing hormone agonists have long been used effectively for pre-operative fibroid shrinkage and correction of anaemia. Their use is, however, limited by their significant unwanted side effect profile relating to hypoestrogenism and hot flushes, and limited to 6 months due to the deleterious effect on bone loss.

UPA is a selective progesterone receptor modulator (SPRM) that efficiently binds and inhibits target progesterone receptors in target tissue such as the uterus, ovaries and hypothalamus. The use of SPRMS for fibroid treatment dates back 20 years, however UPA is the first to obtain TGA approval for an indication associated with fibroids. UPA has ascertained its role within the SPRM family because of its reduced anti-glucocorticoid activity.

Five Phase III studies were assessed by the TGA for product safety and efficacy prior to approval. Two of those studies are considered pivotal as they provided data for long-term administration of UPA for uterine fibroids. The use of UPA in up to four repeated treatment courses showed clinically relevant reductions in myoma volume, uterine volume and improvement in quality of life parameters. The data showed that 70% of women experienced reduced bleeding with 60-80% being satisfied with the treatment. Three studies provided data for short term pre-operative use of UPA and are considered supportive showing up to 90% of women had clinically reduced bleeding volume. The studies included a direct comparison of UPA to leuprolide and appeared to have a more favorable adverse effects profile including hypoestrogenic symptoms, such as fewer hot flushes and no major effects on markers of bone turnover.

Administration of SPRMs is associated with a pattern of benign, nonphysiological, nonproliferative histologic changes in the

endometrium termed PRM associated endometrial changes (PAEC). Spontaneous rapid reversibility of these changes occurs a few weeks to months after treatment cessation. There is no evidence to suggest that these changes increase the future risk of hyperplasia-with-atypia or endometrial carcinoma. It is recommended that patients undergoing repeated intermittent treatment with UPA undergo annual ultrasounds and an endometrial biopsy in cases of persistent thickening or abnormal bleeding pattern.

1. Department of Health Therapeutic Goods Administration: Australian Public Assessment Report for Ulipristal acetate (Esmya). October 2016
2. Donnez J, et al. Ulipristal acetate versus placebo for fibroid treatment before surgery. N Engl J Med. 366: 409-420; 2012
3. Donnez J, et al. Long-term treatment of uterine fibroids with ulipristal acetate. Fertil Steril. 101: 1565-73; 2014

An Interesting Case Of A Multifibroid Uterus In Pregnancy

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Uterine leiomyomas are benign tumours of uterine smooth muscle, most common in women of reproductive age. The incidence in pregnancy ranges from 1.6-10.7% [1-3]. Fibroids usually remain stable in growth during pregnancy, however due to oestrogenic effects, 22-32% of cases increase in size [4,5,6]. Fibroids greater than 5cm in diameter are most likely to experience growth, with a mean increase in volume of 12%, few grow more than 25% [3,5,6].

Fibroids impact pregnancy in many ways including pain, malpresentation, IUGR, preterm birth/PPROM, APH and abnormal placentation. A major implication includes a threefold increase in risk of caesarean section [7]. Additionally PPH in these women is almost doubled [7]. There is minimal literature available on leiomyomas that have grown during pregnancy.

A 36-year-old primiparous Caucasian woman was referred from a regional centre with multiple fibroids for delivery planning at Gold Coast University Hospital. Her dating ultrasound showed two subserosal fibroids arising inferiorly, measuring 10.8cm and 6.8cm. Her morphology ultrasound demonstrated three uterine fibroids, measuring 17cm (anterior), 9.6cm (posterior) and 5.3cm (left lateral) in the lower segment. On ultrasound at 26 weeks, separate fibroids could not be appreciated but a mass of 20cm (longitudinally) by 25cm (transverse) by 12.2cm (antero-posterior) was visualised on the left-lateral wall.

An MRI demonstrated a uterine length of 32.6cm, width of 29cm and a depth of 20cm with an anterior placenta not involved with the fibroids. The anterior fibroid measured 9.2cm by 15.7cm by 20cm and a posterior fibroid measured 6cm by 8.1cm by 8cm, both in the lower segment of the uterus. There was a small region of normal myometrium at the fundus of 13mm thickness.

Over 30 weeks, the fibroids nearly doubled in size, obstructing the cervical canal and prevented a vaginal birth. A multidisciplinary team recommended an elective caesarean section+/-hysterectomy under regional anaesthesia with ICU availability. Access to uterus was gained by a midline laparotomy incision extending from the xiphisternum to supra-pubic region. After uterine exteriorisation, a fundal incision facilitated delivery. Blood loss was estimated at 3247ml with 470mls cell salvaged. Pictures taken intraoperatively will be presented and compared with USS and MRI images. She had an uncomplicated elective total abdominal hysterectomy due to ongoing abnormal uterine bleeding and dysmenorrhoea post-partum.

Although a rare and interesting case, fibroids have the potential to impact the pregnancy outcome and mode of delivery. Recognition of these implications and a multidisciplinary approach enabled a planned and safe delivery.

1. Qidwai GI, Caughey AB, Jacoby AF. Obstetric outcomes in women with sonographically identified uterine leiomyomata. Obstet Gynecol 2006; 107:376
2. Exacoustòs C, Rosati P. Ultrasound diagnosis of uterine myomas and complications in pregnancy. Obstet Gynecol 1993; 82:97.
3. Strobelt N, Ghidini A, Cavallone M, et al. Natural history of uterine leiomyomas in pregnancy. J Ultrasound Med 1994; 13:399

Laparoscopic Removal Of Non-Communicating Rudimentary Uterine Horn

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Unicornuate uterus with rudimentary uterine horn is a Class 2 AFS classification of Müllerian anomaly, which can lead to pelvic pain and reproductive complications such as ectopic pregnancy and uterine rupture (1). Unicornuate uterus with rudimentary horn occurs when the pair of paramesonephric ducts fail to fuse in the midline and compounded with deficiency of cannulation (1). Unicornuate uterus accounts for 10% of all müllerian anomalies and occurs in 1:4020 women in the general population and it is more common in infertile women (2).

There is limited evidence to suggest removal of rudimentary uterine horn improves reproductive outcome. However, the excision of the rudimentary horn can improve pelvic pain and prevent endometriosis caused by menstrual reflux, and prevent ectopic pregnancy (3).

We present a case of a 21 year old woman who is symptomatic from an obstructed uterine horn. Patient presented with a worsening history dysmenorrhea and pelvic pain despite continuous use of combined oral contraceptive pill. Patient underwent an operative laparoscopy at the age of 16, excision of endometriosis was performed and a unicornuate uterus with noncommunicating uterine horn was diagnosed.

Pre-operative evaluation including CT intravenous pyelogram showed normal course of ureters, and normal bladder and kidneys. Intra-operatively, cystoscopy and left ureteric stent was inserted prior to laparoscopy. Saline hysteroscopy showed a small uterine cavity with normal endometrium and one ostia. The video presentation will demonstrate the surgical technique of laparoscopic removal of a non-communicating rudimentary uterine horn, including identification of surrounding anatomy, minimising the risk of penetration into the cavity of the hemi-uterus and attention to haemostasis is emphasized. Patient reported a significant improvement of symptoms at 6 months follow up.

Conclusion: The combination of cystoscopy with ureteric stenting, hysteroscopy and laparoscopy are effective and safe in management of uterine anomalies.

1. American Fertility Society. The American Fertility Society classification of adnexal adhesions, distal tubal occlusion, tubal occlusion secondary to tubal ligation, tubal pregnancies, Mullerian anomalies and intrauterine adhesions. Fertil Steril 1998;49:944–55.
2. Reichman D, Laufer MR, Robinson BK. Pregnancy outcomes in unicornuate uteri: a review. Fertil Steril. 2009;91(5):1886.
3. Fedele L, Bianchi S, Zanconato G, Berlanda N, Bergamini V. Laparoscopic removal of the cavitated noncommunicating rudimentary uterine horn: surgical aspects in 10 cases. Fertil Steril. 2005 Feb;83(2):432-6.

A Case Series Of Intravenous Leiomyomatosis And Literature Review

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Intravenous leiomyomatosis (IVL) is an uncommon benign smooth-muscle tumour of the uterus which invades into uterine and systemic veins. Although benign, this tumour may grow in the absence of, or beyond the confines of a uterine leiomyoma or fibroid, and has the potential to behave aggressively via extension of growth in the venous vasculature, upwards into the inferior vena cava (IVC) and into the right cardiac chambers. This can lead to serious cardiac and pulmonary sequelae. Rarer neurological sequelae and fatal cases have also been reported. Unless there is obvious IVC or intracardiac spread on preoperative imaging, IVL poses a diagnostic challenge. IVL has been reported in the literature as a rare event and is postulated to be more common than previously reported. Potentially this change is related to increased histopathological diagnosis following hysterectomy or fibroid excision. The prognosis of the cases is unknown but requires follow up as recurrence is possible.

This case series of 12 patients who were diagnosed on post-operative histopathology with IVL in a 20-month period at The Royal Women's Hospital, Victoria, Australia and a literature review of the current management of this unusual disease.

1. Du J, Zhao X, Guo D, Li H, Sun B. Intravenous leiomyomatosis of the uterus: a clinicopathologic study of 18 cases, with empha- sis on early diagnosis and appropriate treatment strategies. Hum Pathol. 2011;42(9):1240-1246.
2. Fukuyama A, Yokoyama Y, Futagami M, Shigeto T, Wada R, Mizunuma H. A case of uterine leiomyoma with intravenous leiomyomatosishistological inves ga on of the pathological condi on. Pathol Oncol Res. 2011;17(1):171-174.
3. Hirschowitz L, Mayall FG, Ganesan R, McCluggage WG. Intra- vascular adenomyomatosis: expanding the morphologic spec- trum of intravascular leiomyomatosis. Am J Surg Pathol. 2013; 37(9):1395-1400.

The Use Of The Da Vinci Robotic Platform In The Treatment Of Severe Recto-Vaginal Endometriosis

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Objective: To highlight the role and efficacy of robotic surgery in the treatment of severe endometriosis

Case: Our patient is a 35-year-old nulliparous, married female with an 8-year history of ongoing, severe menorrhagia and dysmenorrhoea in addition to unsuccessful attempts for pregnancy that included 2 occasions of IVF treatment.

In 2010, she underwent laparoscopic removal of a left ovarian endometriotic cyst and was also noted to have extensive endometriosis elsewhere in her pelvis. Despite this procedure, she continued to experience symptoms and was admitted

to hospital in 2016 for sudden severe flooding and significant drop in haemoglobin. A follow up ultrasound showed 3 fibroids, including a 6cm pendunculated fibroid, with no mention of submucosal fibroid.

A working diagnosis of (i) severe menorrhagia secondary to fibroids and (ii) endometriosis was devised and subsequent investigation and treatment of the underlying pathologies in the form of hysteroscopic or laparoscopic surgery was considered.

Of significance, in 2015, she underwent major laparotomy for removal of a benign tumour that necessitated splenectomy and distal pancreatomy. Later that year she went on to develop an infected pancreatic cyst that was managed appropriately. Given this extensive history of abdominal surgery and very high-risk for intra-abdominal adhesions, this was considered a surgical case fraught with complexity.

Intervention: in this video, we demonstrate the surgical techniques and discuss the steps involved in the use of the DaVinci Xi robotic platform for adhesiolysis and excision of recto-vaginal endometriosis infiltrating through the posterior fornix.

Conclusion: Robotic excision of severe recto-vaginal endometriosis is feasible and safe. However, its role is still yet to be defined in the surgical management of this condition.

Decision Tree Analysis Incorporating hCG Ratio Versus Risk Prediction Model (M4): Prospective Interventional Study To Rationalise The Management And Follow Up Of Women With A Pregnancy Of Unknown Location

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Objectives: To determine if the human chorionic gonadotrophin(hCG)ratio algorithm is comparable to the mathematical model(M4) in management of women with pregnancy of unknown location(PUL).

Methods: Prospective interventional study included women attending EPAU between August 2011-March 2016 and classified with PUL on TVS .Women stratified according to hCG ratio(hCG 48 h/hCG 0 h).If ratio≤0.79 and women were stable, then discharge on D2. For ratios of 0.80 to 0.99, women asked to have a repeat hCG on D7.For ratios ≥ 1.0, women had repeat TVS on D7. M4 applied retrospectively to same dataset. Comparisons made between the two models in terms of diagnostic performance, relationship to clinical outcomes, misclassification &diagnostic capabilities at D2 & D7.

Results: 2,650 consecutive women had TVS. 250(9.43%) classified as PUL, 42 were excluded. 208 cases included in the final analysis. Final PUL outcomes were:131 failed PUL(60.0%),46 intra-uterine pregnancy(22.1 %), 20 ectopic pregnancies EP(9.6%)& 11 persistent PUL(5.3%). Both hCG algorithm &M4 categorised 16/20 EPs to high risk group with sensitivity of 80%. 113/131 and 109/131 failed PULs were correctly classified by hCG algorithm&M4,respectively. According to hCG algorithm113/126(89.6%)failed PUL discharged on D2 with no complication,M4allocated high risk probability to 7 of these cases. Between D2 &D7 hCG algorithm discharged additional 13 failed PUL compared to 5 discharged by M4.

Conclusions: Although the diagnostic performance of M4 is better than the novel hCG ratio algorithm to predict the final PUL outcome, the novel hCG ratio algorithm method appears to be appropriate approach to rationalize the management of women with a PUL.

1. Van Calster B, Abdallah Y, Guha S, Kirk E, Van Hoorde K, Condous G, et al. Rationalizing the management of pregnancies of unknown location: temporal and external validation of a risk prediction model on 1962 pregnancies. Human reproduction. 2013;28(3):609-16.1)
2. Bobdiwala S, Guha S, Van Calster B, Ayim F, Mitchell-Jones N, Al-Memar M, et al. The clinical performance of the M4 decision support model to triage women with a pregnancy of unknown location as at low or high risk of complications. Human reproduction. 2016;31(7):1425-35.
3. Condous G, Van Calster B, Kirk E, Timmerman D, Van Huffel S, Bourne T. Prospective cross-validation of three methods of predicting failing pregnancies of unknown location. Human reproduction. 2007;22(4):1156-60.

Sensitivity And Specificity Of Pretreatment hCG Ratio In Non–Surgical Management Of Tubal Ectopic Pregnancy

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Objectives: We aim to test sensitivity and specificity of pretreatment hCG ratio in predicting the success of the non-surgical management of tubal ectopic pregnancies

Methods: Prospective cohort study consecutive women presenting to EPU (Nov 2006 - March 2016). All women diagnosed tubal EP on transvaginal scan (TVS) and clinically stable had serum hCG levels taken 0h and 48h to determine pre-treatment hCG ratio (hCG 48h/hCG 0h). Women whose hCG ratio 48h < 1.0 were selected for expectant management whilst those whose hCG ratio ≥ 1.0 were selected for methotrexate (MTX). Following were recorded: hCG 0h and 48h, pre-treatment hCG ratio. Overall rate of non-surgical management and success of each management were calculated. Univariate analysis used to determine association between different cutoff points of hCG ratio and management outcome. Sensitivity and specificity calculated for each cutoff point.

Results: 8,360 consecutive women underwent TVS; 346/8360 (4.2 %) diagnosed with EP. 179/346 (51.7%) women had non-surgical management: 153/179 (85.4%) tubal EP and 26/179 (14.5%) non-tubal EP. On basis of pre-treatment hCG ratio, 67/153 (43.7%) had MTX with a success rate of 76.1% and 86/153 (56.2%) had expectant management with success rate of 81.3%. At an hCG ratio cut-off value of 1.18, the highest value of sensitivity and specificity of the hCG ratio to predict success of medical management was 63.3% and 48.8 respectively. For expectant management the highest sensitivity and specificity were 71.4% and 66.6 % respectively recorded at an hCG ratio cut-off of 0.8.

Conclusions: Pre-treatment hCG ratio at 48h can be used as a tool to predict success of non-surgical management of tubal ectopic pregnancies.

1. Kirk E, Van Calster B, Condous G, Papageorghiou AT, Gevaert O, Van Huffel S, et al. Ectopic pregnancy: Using the hCG ratio to select women for expectant or medical management. Acta obstetricia et gynecologica Scandinavica. 2011;90(3):264-72.
2. Mol F, Mol BW, Ankum WM, van der Veen F, Hajenius PJ. Current evidence on surgery, systemic methotrexate and expectant management in the treatment of tubal ectopic pregnancy: a systematic review and meta-analysis. Human reproduction update. 2008;14(4):309-19.
3. Atri M, Chow CM, Kintzen G, Gillett P, Aldis AA, Thibodeau M, et al. Expectant treatment of ectopic pregnancies: clinical and sonographic predictors. AJR American journal of roentgenology. 2001;176(1):123-7.

A Rare Case Of A Ruptured Dermoid Cyst

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Background: Dermoid cysts are benign cystic teratomas which occur to women of any age, but predominantly in those of reproductive age (1,2). They are the most common ovarian tumour and germ cell tumour (1,2). Many complications can arise from dermoid cysts and some of these include ovarian torsion, malignant degeneration, cyst rupture and infection (1). The rate of rupture is usually low at 1-2% with a higher incidence in iatrogenic rupture particularly with laparoscopy (1,2). Spontaneous ruptures of dermoid cysts are rare and there are only a handful of cases reported in the literature. The gold standard of surgical management of dermoid cysts is laparoscopic cystectomy with the aim to keep the cyst intact. However, considerations should be taken to patient factors, surgical factors, cyst size, location and complexity.

Case Presentation: Mrs VM is a 66-year-old post-menopausal overseas visitor who initially presented to the Emergency Department with a 2-day history of sudden onset of sharp abdominal pain to the umbilical and suprapubic region and a temperature of 37.9. She is a Para 6 with all normal vaginal deliveries and no relevant past medical or surgical history. On examination, she was febrile but otherwise hemodynamically stable. Her abdomen was soft and she had rebound tenderness over the lower abdomen. Her CT abdo-pelvis showed a complex cystic structure likely consistent with a dermoid cyst in the right adnexa. The Pelvic ultrasound revealed large right-sided complex mixed solid cystic mass in the right adnexae measuring 10x3.2x6cm. Tumour markers of CA125 was 29 with a low Risk of Malignancy Index. She underwent a semi-urgent elective laparoscopic bilateral salpingo-oophorectomy which has to be converted to a laparotomy due to an inadvertent small bowel injury and bleeding on laparoscopic entry. Laparoscopic entry was complicated by unexpected multiple bowel adhesions to the anterior abdominal wall secondary to spontaneous intraperitoneal rupture of dermoid cyst and chemical peritonitis. Her post-operative course was unremarkable, and she was discharged home on day 5.

Discussion: Dermoid cysts are known to have a thick capsule and thus the risk of spontaneous rupture of dermoid cysts are

rare. Surgical management of this case and a review of the literature on spontaneous rupture of dermoid cysts will be discussed.

1. 1. Fibus TF. Intraperitoneal Rupture of a Benign Cystic Ovarian Teratoma: Findings at CT and MR Imaging. American Journal of Roentgenology. 2000;174(1):261-262. doi: 10.2214/ajr.174.1.1740261
2. 2. Sinha A, Ewies AAA. Ovarian Mature Cystic Teratoma: Challenges of Surgical Management. Obstetrics and Gynecology International. 2016;vol. 2016:Article ID 2390178, 7 pages. doi:10.1155/2016/2390178

Dermoid Removed, Another Life Saved. Anti-NMDA-Receptor Encephalitis Due To Ovarian Dermoid Tumours

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We present a case of Anti-N-methyl-D-aspartate receptor (NMDA-R) encephalitis associated with a very small (9mm) ovarian teratoma. Removal of the ovarian dermoid tumour along with immunosuppressive therapy led to full recovery of the patient. This under-recognised para-neoplastic syndrome can lead to a complex and life threatening condition. We demonstrate that quick removal of the associated tumour allows for a better prognosis.

Laparoscopic Hysterectomy Outcomes, Caseload And Training: A Retrospective Audit

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Background: Hysterectomy is the most common surgical procedure in reproductive-age women. Laparoscopy is the preferred surgical approach for most women because of shorter length of hospital stay, reduced post-operative pain and faster return to normal activities(1). Operative outcomes may be directly related to surgical volumes(2). In the past decade, surgical volume for gynaecology trainees has declined due to the introduction of safe working hours, increased trainee numbers and a decline in gynaecological surgical cases due to the improved medical management of several gynaecological complaints (3).

Objective: Our aim was to investigate whether surgeon factors including level of training undertaken in minimally invasive surgery, time in specialist practice and surgical caseload were associated with surgical morbidity.

Methods: A retrospective cohort study. Patient demographic and surgical outcome data were abstracted from medical records. Operating times were ascertained from an electronic operating theatre database. Patients treated by robotic-assisted hysterectomy were excluded.

Results: Two thousand and fourteen patients were included for analysis. Mean age was 51.8 years (21 – 97, SD 1.59. Mean body mass index (BMI) was 27.5 (17 – 55, SD 6.52) and uterine weight 165.2 (23 – 1264, SD 138) grams. Mean surgical operating time was 69.02 (15 – 361, SD 36.04) minutes. There were 123 major intraoperative complications (6.1% of the total cases). Conversion to laparotomy occurred in 25 cases (1.2%). There were 45 post-operative complications (2.2%) and 74 patients were readmitted to hospital in the first 6 weeks' post-surgery (3.7%). Factors significantly associated with any intra-operative complication were undergoing a concurrent pelvic/abdominal surgical procedure (OR 0.21; p = <0.001, 95% CI = 0.31 – 0.35) and years since surgeon qualification (OR 0.44; p = <0.001, 95% CI = 0.29 – 0.67). Increased BMI and uterine weight were associated with small but significant increases in intraoperative morbidity (OR 1.035; p= <0.001, 95% CI 1.005 - 1.066 and OR 1.003, p = <0.001, 95% CI = 1.002 - 1.005 respectively). Higher level of training (OR 0.46; p = <0.001, 95% CI 0.25 – 0.86) and time in practice (OR 0.44; p = <0.001, 95% CI = 0.29 – 0.67) were associated with a lower risk of bladder injury. Surgical volume was not associated with intra-operative morbidity.

Conclusion: In this study, level of sub-specialist training and time in practice were associated with lower surgical morbidity.

1. AAGL position statement: route of hysterectomy to treat benign uterine disease. Journal of minimally invasive gynecology. 2011;18(1):1-3.
2. Mowat A, Maher C, Ballard E. Surgical outcomes for low-volume vs high-volume surgeons in gynecology surgery: a systematic review and meta-analysis. American journal of obstetrics and gynecology. 2016;215(1):21-33.
3. Acton J, Salfinger S. Challenges Facing the Modern Gynaecologic Trainee AGES Focus Meeting, 2011.

Portable Video Media As An Adjunct To Informed Consent For Gynaecological Surgery: Review Of The Literature And Abstract For A Prospective Randomised Clinical Trial

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Synopsis: There is emerging evidence of discordance between signed and informed consent following standard verbal communication between patient and clinician prior to an invasive procedure. Several studies (outside the field of gynaecology) have shown promise with audio-visual methods of patient education leading to greater comprehension and reduced patient anxiety prior to an operation. Portable multimedia devices in particular afford the convenience of use in outpatient clinic rooms. Hysteroscopy, as a commonly performed gynaecological procedure, lends itself to video assisted education. It is hypothesised that the addition of audio-visual information will enhance the informed consent process and improve the patient experience.

Study Design: Literature review relating to use of multimedia adjuncts to informed consent prior to surgery.
Abstract for a single centre prospective randomised controlled trial, which has HREC LNR approval and is currently recruiting patients. Eligible patients (18 years of age and older; sufficient capacity and English language skills to provide consent; having a hysteroscopic procedure for standard gynaecological indications) will all receive verbal information as part of the standard consent process, and will be randomised to intervention with additional information provided via portable video media device. Outcome measures relating to patient satisfaction with the consent process will be obtained through a patient questionnaire performed at the time of outpatient follow up after the procedure.

The hysteroscopy patient information video will be included as part of the digital presentation.

1. Kinnersley P, Phillips K, Savage K, Kelly MJ, Farrell E, Morgan B, Whistance R, Lewis V, Mann MK, Stephens BL, Blazeby J, Elwyn G, Edwards AGK. Interventions to promote informed consent for patients undergoing surgical and other invasive healthcare procedures. Cochrane Database of Systematic Reviews 2013, Issue 7
2. Synnot A, Ryan R, Prictor M, Fetherstonhaugh D, Parker B. Audio-visual presentation of information for informed consent for participation in clinical trials. Cochrane Database of Systematic Reviews 2014, Issue 5.
3. Gillies K, Cotton SC, Brehaut JC, Politi MC, Skea Z. Decision aids for people considering taking part in clinical trials. Cochrane Database of Systematic Reviews 2015, Issue 11

Vaginal Morcellation - It's All In The Bag

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Laparoscopic surgery is often the safest and most efficacious approach for gynaecological surgery. Removal of an enlarged organ requires some destructive extraction technique to maintain our minimal access benefits. Undiagnosed leiomyosarcoma has challenged this tenet, in the setting of the enlarged, multifibroid uterus at total laparoscopic hysterectomy.

Recently many products and surgical techniques have aimed to reduce the risk associated with operative morcellation. We have developed a unique vaginal technique, using available equipment, while meeting the need for contained collection of the enlarged uterus at hysterectomy.

We present the technique, and patient outcomes from our initial series of 45 patients using the Applied Containment Extraction System vaginally.

A 'see one, do one, teach one' technique that has favourable patient outcomes (blood loss (av. 42ml), operative port sites (12,5,5,5), nil conversion rate) is cost-effective (equipment used, operating theatre morcellation times (av. 9.5 mins)) and suitable for challenging clinical scenarios (high BMI, peri-menopausal, enlarged uteri (av. 470 gm, 165 – 1450 gm) and unexpected abdominal pathology (10 cm mucocoele).

Evolution Of An Atypical Fibroid On MRI Over A 4 Year Period - A Case Report

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The term smooth muscle tumour of uncertain malignant potential (STUMP) refers to a uterine smooth muscle tumour which cannot be unequivocally diagnosed as benign or malignant. The diagnosis and management of these tumours remains controversial, particularly in pre-menopausal women desiring fertility. While STUMP tumours do not have the

poor prognosis of a leiomyosarcoma (LMS), they can recur in up to 11% of cases (Dall'Asta 2014) and surgical management is with total hysterectomy. However, surgery has the potential for significant morbidity or mortality.

Whilst ultrasound remains the primary screening tool for leiomyomas, magnetic resonance imaging (MRI) is increasingly being used as a noninvasive way to diagnose a potential STUMP and thereby guide surgical management. Features suspicious for a STUMP on MRI include the presence of diffusion restriction, heterogenous enhancement, an irregular border, marked internal vascularity, rapid growth and myoinvasion, however it can be difficult to differentiate between other atypical leiomyomas (including benign cellular leiomyomas and benign symplastic leiomyomas) and a STUMP.

We present a case report describing a patient in a tertiary hospital in Victoria who was found on screening for infertility to have an atypical fibroid. She underwent serial MRI surveillance over four years from 2012 to 2016 for a possible STUMP after repeatedly declining hysterectomy. Ultimately she agreed to a hysterectomy and bilateral salpingectomy with washings 18 months after delivering her first child, at which time the pathology returned as benign.

We present the serial MRI images for this patient to demonstrate the characteristics of her fibroid over its four year evolution and compare these to images of a histologically-confirmed STUMP, and a histologically-confirmed LMS.
Our case report demonstrates the ongoing difficulty in diagnosis and management of suspected STUMP tumours.

Unplanned Hysterectomies Following Myomectomies At A Tertiary Institution

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Introduction: Myomectomy is the gold standard uterine-sparing treatment for fibroids. Despite this, the procedure is often complicated by haemorrhage. Adequate pre-operative planning and intraoperative haemoconservative interventions may ameliorate this complication.

Hysterectomy is an alternative treatment to myomectomy for women who no longer desire fertility. It may also be performed for complex cases or as a salvage operation following myomectomy. The rate of conversion from an abdominal myomectomy to hysterectomy is 0.78%[1]-3.7%[2] and, 2%[3]-2.8%[2] for a laparoscopic myomectomy.

There are no formal guidelines as to when a myomatous uterus requires a hysterectomy, as opposed to myomectomy.
The aim of our study was to investigate the rates of, and clinical reasoning behind unplanned hysterectomies following myomectomies at our institution.

Methods: All patients who underwent an open or laparoscopic myomectomy unexpectedly converted to a hysterectomy at the Royal Women's Hospital were identified using a gynaecology unit database, maintained from January 2004 to December 2013. Records for these patients were reviewed.

Results: Of the 1501 myomectomies performed, 6 procedures resulted in an unplanned hysterectomy; an incidence rate of 0.4%. Median age was 41 (IQR: 40:44) with operative indications including pressure symptoms (n=2), menorrhagia (n=1) or both (n=3).

These patients were strongly advised to have a planned hysterectomy, however all 6 patients elected for uterine preservation due to a desire to retain fertility (n=3), a reluctance to lose their uterus (n=1) or operative preference (n=2).
Fibroids were either intramural (n=5) or pedunculated (n=1) with the median number of tumours per patient being 2.5 (IQR: 1:6). The largest tumour for each patient varied significantly from 4.0x3.2cm to 29.0x25.0cm.

Preoperative imaging consisted of both ultrasonographic (US) and magnetic resonance imaging (MRI) (n=1), US imaging alone (n=4) or no imaging (n=1). Preoperative haemoglobin was measured and corrected in all patients.

Two patients in our cohort underwent conversion to hysterectomy intra-operatively while the remainder returned to theatre in a median time of 21 hours (IQR: 11:24).

Difficulty achieving intraoperative haemostasis (n=2), and the development of post-operative bleeding and coagulopathy (n=4) were reasons cited for proceeding to hysterectomy. Median total blood loss was 2L (IQR: 1.55:4.50). Only one case utilised haemostatic agents and techniques, with fibrillar, a tourniquet and suturing of peritoneal folds employed for control of bleeding.

Conclusion: The six reported cases describe the unplanned conversion of myomectomy to hysterectomy. In all cases, the decision to proceed with a hysterectomy was due to difficulty achieving haemostasis.

1. LaMorte AI, Lalwani S, Diamond MP. Mobidity associated with abdominal myomectomy. Obstet Gynecol. 1993; 82(6); 897-900
2. Subramanian S, Clark MA, Isaacson K. Outcome and resource use associated with myomectomy. Obstet Gynecol. 2001; 98(4): 583-7
3. Saccardi C, Gizzo S, Noventa M, Abcona E, Borghero A, Litta PS. Limits and complications of laparoscopic myomectomy: which are the best predictors? A large cohort single-centre experience. Arch Gynecol Obstet. 2014; 290(5): 951-6

Correlation The Morphological Ultrasound Types Known As 'Blob' And 'Bagel' Signs With The Laparoscopic Histopathology Findings: Should Be Reclassified From Probable To Definite Ectopic Pregnancy

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Objectives: In a recent consensus statement on early pregnancy nomenclature by Barnhart 2011,a definite ectopic pregnancy (EP)defined morphologically on transvaginal ultrasound (TVS) as an extra-uterine gestational sac (GS) with yolk sac and/or embryo(with or without cardiac activity) whilst a probable EP defined as an inhomogeneous adnexal mass "blob" sign or extra-uterine sac-like structure "bagel" sign. This study aims to determine whether the ultrasound markers used to define probable EP can be used to predict definite tubal EP.

Methods: A retrospective cohort study of women presenting to the Early Pregnancy Unit (EPU) from January 2006 to June 2016. Women classified with a probable EP or pregnancy of unknown location (PUL) i.e no signs of extra or intrauterine pregnancy at the first TVS were included whilst those with a definite EP, intra-uterine pregnancy (IUP) or non-tubal EP were excluded from the final analysis. The gold standard for EP was histological confirmation of chorionic villi in the removed fallopian tube at laparoscopy.The performances of 'probable EP' on ultrasound were evaluated in terms of sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV). This was compared to the performance of 'definite EP' to predict EP.

Results: During the study period 7,490 consecutive women attended the EPU.In total, 849 (240 probable EPs & 609 PULs at primary TVS) included in the final analysis. 6,515 IUPs, 21 definite EPs &48 non-tubal EPs excluded from the study. 57 women lost follow up.Probable EPs classified as either blob (174/240 (72.5%)) or bagel signs (66/240 (27.5%)). PUL final outcomes included: 47 EPs (24 blob, 19 bagel and 4 GS with embryo/yolk sac),391 failed PULs, 143 IUPs & 28 persistent PULs. 101/198 (51%) of all "blob" sign cases and 50/85 (59%) of all "bagel" sign cases had surgery.Histology proved a tubal EP in the "blob" & "bagel" groups in 98/101 (97%) and 48/50 (96.0%), respectively.For blob sign the sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) were 89.9%, 99.5%, 97% and 98.3% respectively.For bagel sign the results were: 83.3%, 99.6% 95% and 98.6%, respectively.This was comparable to the sensitivity, specificity, PPV and NPV for the presence of a definite EP on TVS: 82.7%, 99.9%, 97.7% and 99.2% (p=0.5).

Conclusion: We believe that the definition of EPs classified on TVS should be broadened to ensure that both definite EPs,i.e.extra-uterine GS with yolk sac and/or embryo and probable EPs, i.e."blob"or"bagel" signs, are unified in the same category.

1. Barnhart K, van Mello NM, Bourne T, Kirk E, Van Calster B, Bottomley C, et al. Pregnancy of unknown location: a consensus statement of nomenclature, definitions, and outcome. Fertility & Sterility. 2011;95(3):857-66.
2. Condous G, Okaro E, Khalid A, Lu C, Van Huffel S, Timmerman D, et al. The accuracy of transvaginal ultrasonography for the diagnosis of ectopic pregnancy prior to surgery. Human reproduction. 2005;20(5):1404-9.
3. Mol F, van Mello NM, Strandell A, Strandell K, Jurkovic D, Ross J, et al. Salpingotomy versus salpingectomy in women with tubal pregnancy (ESEP study): an open-label, multicentre, randomised controlled trial. Lancet. 2014;383(9927):1483-9.

Ureterolysis At Time Of Laparoscopy For Excision Of Pelvic Side Wall Superficial Endometriosis: Introducing VACU-Lysis

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Objectives: Safe laparoscopic surgery is of paramount importance. Visualisation of ureters and ureterolysis are important skills if excisional surgery for pelvic side wall (PSW) endometriosis is to be done safely. We demonstrate a safe and easy method to perform ureterolysis.

Methods: Retrospective case series of women scheduled for laparoscopic excision of endometriosis between January 2015

until November 2016. In each woman with PSW peritoneal endometriosis, the ureter was identified by direct visualisation and confirmed by inducing vermiculation. The peritoneum 1 cm above the ureter (at the level of the ovarian fossa) was opened using monopolar diathermy cutting and the peritoneum was then sharply cut (parallel to the ureter) in the direction of the ipsilateral uterosacral ligament. Once this dissection line was created, then the inferior peritoneum was held in one hand with a laparoscopic grasper and the ureter was dissected off the peritoneum retroperitoneally using the suction irrigator aka VACU-lysis. Once the ureter was safely dissected off the overlying peritoneum then the PSW endometriosis was excised using monopolar cutting. The procedure involved uses a conventional laparoscopic suction device and takes only 2 minute on average. Please see video.

Results: A total of 64 women underwent laparoscopic excision of endometriosis during the study period. 40/64 women had laparoscopic excision of PSW superficial endometriosis using VACU-lysis of the ureter. The learning curve for the registrars (years 4 – 6 ITP) was 3 - 5 cases. In this series only one case had temporary haematuria post operatively which resolved within 72 hours.

Conclusions: VACCU-lysis is safe and easy method to dissect the ureter away from PSW prior to excision of PSW superficial endometriosis.

Retrospective Audit On Laparoscopic Sacrocolpopexy With Ultra-Lightweight Mesh

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Publish consent withheld

1. Matthews CA. Minimally invasive sacrocolpopexy: How to avoid short- and long-term complications. Curt Urol Rep 2016 Nov;17(11):81
2. Claerhout F, Deprest J, et al. Medium-term anatomic and functional results of laparoscopic sacrocolpopexy beyond the learning curve. Eur Urol. 2009; 55(6): 1459-67
3. Costantini E, Maher CF, et al. Sacrocolpopexy for pelvic organ prolapse: evidence-based review and recommendations. Eur J Obstet Gynecol Retrod Biol 2016 Oct;205:60-5

Laparoscopic Anatomy Of The Superior And Inferior Hypogastric Plexus In The Cadaver

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Laparoscopic retroperitoneal anatomy remains a difficult subject for the trainees, and aspiring advanced laparoscopic surgeons.

For instance, the occasions to apprehend the laparoscopic anatomy of the pelvic autonomous system remain scarce and are usually based on theoretical acquisitions and video presentations. The inferior hypogastric plexus is rarely dissected except for the purpose of nerve sparing radical oncological or endometriosis surgery. Most trainees would spend their 6 years of training without actually seeing those nerves. Efforts have been made to systematise the pelvic neuroanatomy, and cadaver studies remain invaluable. (1)

This digital presentation will highlight the anatomical landmarks of the autonomous innervation of the female pelvis, based on the laparoscopic dissection of a fresh frozen cadaver.

The superior hypogastric plexus, the right hypogastric nerve, and the right inferior hypogastric plexus were carefully dissected and exposed for the purpose of this educative video.

Correlations with the literature and classic anatomy from the textbooks (2) will be presented.

1. Moszkowicz D, Alsaid B, Bessede T, Penna C, Benoit G, Peschaud F. Female pelvic autonomic neuroanatomy based on conventional macroscopic and computer-assisted anatomic dissections. Surg Radiol Anat. 2011
2. Kamina P.. Anatomie opératoire. Gynécologie & obstétrique. Malien. 2000

"All That Glitters Is Not Gold" A Case Report Of Peritoneal Inclusion Cysts And Review Of The Literature

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Peritoneal inclusion cysts, also known as benign multi-cystic peritoneal mesotheliomas, are aggregate masses of variable size, fluid-filled, mesothelial-lined cysts of the abdomino-pelvic cavity [1]. They are rare lesions that occur most frequently in women during their reproductive years [2]. The aetiology and pathogenesis, whether neoplastic or reactive, remains controversial.

Peritoneal inclusion cysts show a predilection for the surfaces of the pelvic viscera and have a high rate of recurrence after excision [2]. This type of lesion does not present a strong tendency to transform into malignancy [3]. It is often misdiagnosed clinically as an ovarian tumour due to similar presentation and mimicking radiological findings [3].

We report on a 46 year old woman who presented to a rural hospital with left iliac fossa pain. She had undergone a total laparoscopic hysterectomy and bilateral salpingo-ophorectomy 16 months' prior secondary to symptomatic endometriosis. Post-operatively, she was commenced on oestrogen replacement therapy. Upon presentation to the rural hospital, imaging was attended and a 23cm fluid-containing pelvic mass was diagnosed. The mass was drained percutaneously, revealing old brown/black fluid with cytology identifying no malignant cells. Two months later, she developed recurrence of her symptoms. Repeat imaging showed recurrence of the cystic mass and development of hydro-ureter and hydro-nephrosis. Following transfer to our tertiary unit, she initially had cystoscopy, retrograde pyelogram and left ureteric stenting performed. Operative laparoscopy then occurred and involved dissection of right-sided pelvic side-wall endometriosis and removal of a left-sided residual ovary and cystic structure. She was commenced on Zoladex post-operatively on the assumption that the condition was secondary to endometriosis. An uneventful post-operative recovery occurred. Histopathological examination of all tissue excised identified remnant ovarian tissue with a peritoneal inclusion cyst and no evidence of endometriosis.

In conclusion, the previous history, clinical presentation and surgical findings were all consistent with endometriosis. The actual diagnosis was that of peritoneal inclusion cysts, confirming that all that glitters is not gold.

Fractional CO2 Vaginal Laser, Monalisa Touch: Does It Work?

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Objective: To assess the effect of fractional CO2 laser in perimenopausal and post menopausal women on genitourinary syndrome of menopause (GSM)

Method: This ongoing prospective study in the northern suburbs of Brisbane with 177 patients (n= 177) was commenced 2 years ago (2015) in women experiencing symptoms due to vaginal atrophy , bladder dysfunction and or vaginal prolpase. The mean age of the patients was 59 +/- 1.4 years. All patients received 3 treatments 4-6 weeks apart and information was captured with a validated pelvic health questionnaire (PHQ) filled at every treatment. All patients were followed up at 10-12 weeks after 3rd treatment.

Results: The data collection was partitioned into 3 sections:
(1) Bladder dysfunction – urinary frequency, nocturia, nocturnal enuresis,
urgency, urge incontinence, stress incontinence , recurrent urinary tract infection (UTI) , impact on social life and associated bother
(2) Prolapse dysfunction – prolapse sensation , prolapse reduction to void, prolapse reduction to defaecate and associated bother
(3) Sexual dysfunction – sufficient lubrication, vaginal sensation,
dyspareunia and associated bother

Conclusion: Treatment with C02 laser indicates significant statistical and clinical improvement in the majority of symptoms reviewed after 3 MonaLisa laser treatments. ($p<0.001$)

Cost-Benefit Analysis For The Use Of Transvaginal Ultrasound In The Work Up Of All Women With Potential Endometriosis To Minimal, Mild To Moderate And Complex Endometriosis Disease

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Objectives: 15% of women who present to gynaecology clinic have chronic pelvic pain. Approximately 56% of this group will not have underlying pouch of Douglas(POD) obliteration, endometrioma or deep infiltrating endometriosis i.e. minimal disease present and 26% will have underlying POD obliteration and i.e. severe endometriosis present. 82% of gynaecologists admit to not being able to perform advanced laparoscopic surgery in severe cases of endometriosis. We aim to compare the costs of two models of care in the work-up and management of women with potential endometriosis.

Methods: We compared two models of care: (1) A conventional model (M1) whereby general gynaecologists seeing women with suspected endometriosis proceed directly to diagnostic laparoscopy after a basic pelvic transvaginal (TVS). In M1, if bowel endometriosis+/-POD obliteration was noted at the primary laparoscopy, these women were then referred on to an advanced endosurgery unit for second laparoscopic procedure.(2) A new model (M2) whereby general gynaecologists order a detailed 'deep endometriosis' TVS by an expert sonologist in DIE assessment. In M2, if women were predicted to have minimal disease they would have Mirena IUS inserted as an outpatient. If women in M2 were predicted to have underlying bowel endometriosis+/-POD obliteration they would be referred for pre-operative Colorectal review (+colonoscopy) before undergoing joint Gynae/Colorectal operative laparoscopic procedure. The costs to the public health care system were: consultation $225, detailed 'deep endometriosis' TVS $500, diagnostic laparoscopy $2,541, insertion of Mirena IUS $255, colonoscopy $4,880 and laparoscopic bowel surgery $14,923. The costs of the two models of care were then estimated and compared.

Results: For an outpatient gynaecology unit that reviews 1000 new women annually, 15% (150/1000) would present with chronic pelvic pain. Of these 56% (84/150) would not have underlying complex endometriosis and 26% (39/150) women would have underlying POD obliteration with severe endometriosis. The cost of treating each woman with minimal disease is $2,992 for M1 compared to $1,430 for M2 . This means that there is a cost saving of $1,562 per case or $131,208 annually. The cost of treating each woman with severe endometriosis disease is $23,970 for M1 compared to $21,203 for M2. .This means that there is a cost saving of $2767 per case or $107,913 annually.

Conclusions: M2 which incorporates the use of a detailed 'deep endometriosis' TVS by an expert sonologist in DIE assessment will lead to a significant cost saving to the public healthcare system annually.

Laparoscopic Wedge Resection Of Interstitial Ectopic: A Case Report

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Background: Interstitial ectopic pregnancies are a rare and potentially lethal subgroup of ectopic pregnancies due to their potential for massive haemorrhage. Traditional managements such as laparotomy and hysterectomy are now being replaced by more minimally invasive techniques such as methotrexate, laparoscopic or even hysteroscopic resection.

Case: A 30-year-old woman with ultrasound showing persistent 4.5cm interstitial ectopic after both systemic and intra-sac methotrexate. Laparascopic wedge resection was performed after vasopressin injection to the utero-ectopic interface to aid in reducing haemorrhage. Bipolar cauterisation and multiple layer closure of the uterus resulted in excellent haemostasis, post-operative recovery and return of B-HCG to a non-pregnant state.

Discussion: Despite only accounting for 2-4% of ectopic pregnancies, interstitial ectopics contribute up to 36% of all ectopic related deaths, with a mortality rate of 2-2.5%. Risk factors for interstitial ectopics are similar to those for tubal ectopics with the addition of ipsilateral salpingectomy. Treatment with methotrexate, either systemically or intra-sac, may be successful in up to 80% of patients. Laparascopic management can involve salpingectomy, conuostomy or wedge resection. Methods to reduce haemorrhage include: vasopressin, the use of purse string sutures, Endoloop and ligation of the uterine artery. Caesarean section should be advised for future pregnancies due to lack of evidence for vaginal birth and reports of uterine rupture. Our case further demonstrates that interstitial ectopics can be managed safely with minimally invasive surgical techniques.

1. Confidential Enquiry into Maternal and Child Health. Why Mothers Die 2000–2002. The Sixth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom. London: RCOG Press; 2004
2. Nash S. Moawad et al, Current diagnosis and treatment of interstitial pregnancy. AJOG, Jan 2010
3. Moawad, N.S., Dayaratna, S., Mahajan, S.T. Mini-cornual excision: a simple stepwise laparoscopic technique for the treatment of cornual pregnancy. JSLS. 2009;13:87–9

Fertiloscopic And Laparoscopic Correlations, In Case Of Adhesions Or Endometriosis

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A diagnostic laparoscopy is commonly performed during investigations for female infertility, in women with no known pelvic pathology. The most relevant findings are adhesions or endometriosis. However, the number needed to investigate

in order to obtain a pregnancy, is as high as 40, in a population of low prevalence endometriosis (1). Consequently, the cost effectiveness of this assessment remains controversial. Furthermore, laparoscopy is a surgical procedure associated with risks and complications. Therefore, an appealing alternative is Fertiloscopy, a procedure that can be performed trans vaginally without abdominal incisions. Fertiloscopy incorporates the combination of a transvaginal hydrolaparoscopy and a hysteroscopy.

Although laparoscopy has previously been deemed the 'gold standard' for unexplained infertility, it has been reported that Fertiloscopy could safely replace laparoscopy as a first line investigation in women without clinical or ultrasound evidence of pelvic disease (1). Between 20 – 45.5% of laparoscopic and fertiloscopic evaluations demonstrated no abnormal findings (2,3), hence a significant number of laparoscopies and associated risks could be avoided. Additionally, the concordance between Fertiloscopy and laparoscopy diagnoses has been demonstrated to have 81.8 – 96.5% correlation (2,3). Therefore, Fertiloscopy serves as a reliable procedure to assist with infertility diagnoses and treatment plans.

The following are 2 case studies involving Fertiloscopy as initial investigation for primary infertility, both of which lead to laparoscopic treatments for pelvic pathology. The digital presentation will highlight the correlation between the fertiloscopic and laparoscopic views.

Case 1: A 32 year-old women presented with 15 months of primary unexplained infertility. She had regular cycles, mild dysmenorrhea, normal BMI and hormonal profile. Fertiloscopy demonstrated normal fimbriae, several superficial spots of endometriosis, and a blocked left tube. Laparoscopy was performed, confirming stage 1 endometriosis which was excised, and successful selective catheterisation was performed on the blocked tube. This patient became pregnant 3 months' post laparoscopy.

Case 2: A 30-year-old women presented with 12 months of primary infertility. She had regular cycles, mild dysmenorrhea, and a past surgical history of a midline incision appendicectomy. Hormonal levels and ultrasound were normal. Fertiloscopy was performed, demonstrating patent tubes, and post appendicectomy flimsy adhesions over the right adnexa and pelvic side wall. Laparoscopy was indicated and performed with extensive adhesiolysis. A small loop of bowel was adherent under the umbilicus, highlighting the discussion about potential morbidity of laparoscopy for infertility.

Summary: These two cases demonstrate Fertiloscopy as an appropriate method of identifying infertile patients who may benefit from laparoscopy.

1. Senapati S, Barnhart K. Managing Endometriosis Associated Infertility. Clinical Obstetrics and Gynecology. 2011; 54(4):720-726
2. Dechaud H, Ahmed SA, Aligier N, Vergnes C, Hedon B, Does transvaginal hydolapascopy render standard diagnostic laparoscopy obsolete for unexplained infertility investigation?, European Journal of Obstetrics and Gynaecology and Reproductive Biology, 2001, 94, 97-102
3. Darai E, Dessolle L, Lecuru E, Soriano D, Transvaginal hydrolaparoscopy compared with laparoscopy for the evaluation of infertile women: a prospective comparative blind study, Human Reproduction, 2000, 15(11), 2379-2382

Spontaneous Pregnancy Rates Following Polypectomy In Case Of Infertility: A Retrospective Cohort Study

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Introduction: Endometrial polyps (EPs) are localised growths of uterine mucosa, containing proliferative glands and stroma. Diagnosis may either be by transvaginal ultrasound, HyCoSi, or hysteroscopy. It has been suggested that EPs may contribute to subfertility, with the exact mechanism not well understood. Definitive surgical management of EPs via the gold standard of hysteroscopic polypectomy, has been recommended in infertile patients to improve natural fertility and prior to commencing fertility treatment, but a recent Cochrane review was unable to identify high quality evidence studies to back this clinical evidence (1). The existing studies are small, or retrospective in nature. In a randomised controlled trial, hysteroscopic polypectomy was performed prior to intrauterine insemination, and demonstrated better pregnancy outcomes when compared to the control group (2). Interestingly, pregnancies in the study group were obtained before the first IUI in 65% of cases. Conversely, Lass et al. (2) evaluated the effect of EPs on In Vitro Fertilisation (IVF) and reported no benefit of polypectomy prior to assisted reproductive treatment.

Hence, the aim of this study was to determine whether a hysteroscopic polypectomy could improve the fertility of previously infertile patients.

Objective: To determine the probability of pregnancy post polypectomy in case of infertility, using a retrospective cohort study design

Subject Criteria: A consecutive series of 18 subjects were selected based on a history of unexplained or anovulatory infertility, along with a diagnoses of EP, from 2010 to 2017. Preoperative investigations included either transvaginal

ultrasound, sonohysterogram or HyCoSy to diagnose the EP; followed by hysteroscopy to confirm the presence of the EP.

Intervention: All of the patients were treated with a hysteroscopic polypectomy (5 Fr microscissors or bipolar Versapoint electrodes via a 5 mm mm Bettochi hysteroscope, monopolar or bipolar slender resectoscope). Pathology was sent for histopathological analysis.

Statistical Analysis: Survival analysis (Kaplan-Meier) was performed to determine the cumulative probability of pregnancy post polypectomy.

Results: A total of 18 patients were involved in the study. Ages ranged 29 - 45 (mean 34 years), BMI ranged 18.7 – 33 (mean 24.6), and average size of polyp on histopathology was 12.9mm. 10 out of 18 patients became pregnant within 5 months of the 6-month follow-up period. Kaplan-Meier analysis demonstrated 0.63 cumulative probability of pregnancy within 5 months post polypectomy.

Conclusion: Hysteroscopic polypectomy of EPs seems to improves fertility in infertile patients. The size and position of the polyps do not seem to be critical.

1. 1. Jayaprakasan K, Polanski L, Sahu B, Thornton JG, Raine-Fenning N. Surgical intervention versus expectant management for endometrial polyps in subfertile women. Cochrane Database Syst Rev. 2014 Aug 30;(8)
2. 2. Perez-Medina, T., Bajo-Arenas, J., Salazar, F., Redondo, T., Sanfrutos, L., Alvarez, P., Engels, V. Endometrial polyps and their implication in the pregnancy rates of patients undergoing intrauterine insemination: a prospective, randomized study. Human reproduction 2005. Vol. 20 (6), pp. 1632-1635
3. 3. Lass, A., Williams, G., Abusheika, N., Brinsden, P. The effect of endometrial polyps on outcomes of in vitro fertilisation (IVF) cycles. Journal of assisted reproduction genetics 1999. Vol. 16(8), pp. 410-415

Bladder Endometriosis: A Case Study Highlighting Important Surgical Considerations

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Our case describes the laparoscopic excision of a full thickness bladder endometrioma in a patient presenting with severe dysuria and pelvic pain, with an extensive history of symptomatic endometriosis and prior laparoscopic excisions.
The case was collaboratively managed between the Gynaecology Endoscopy and the Urology teams. She underwent a two-stage procedure with pre-operative ureteric stenting two days prior to definitive management, achieving a purely laparoscopic complete resection. We did not encounter any hypothesized complications and our patient recovered without any sequelae of reduced bladder volume.

There are extensive guidelines on the management of endometriosis; as yet there is no specific guideline on management of bladder endometriomas. Current best practice advice is to proceed to surgery if the lesion is full thickness. This is supported by published case series, which have reported the success rate of partial cystectomy for bladder endometriomas to be around 100%[i].

The current literature only describes JJ stenting in the setting of ureteric endometriosis[i]. During the laparoscopic resection visualization of the ureters was carried out via intraoperative RGPG. The JJ stents in situ aided direct identification of the ureters and the distorted bladder anatomy, whilst providing reassurance of recognition of ureteric injury.

Consideration was also given to the use of pre and postoperative hormonal therapy, however our patient refused any contraceptive treatment. One Cochrane review reports no evidence to support hormonal therapy for pre or postoperative management of pain[ii] in deep infiltrating endometriosis. This is supported by the ESHRE guidelines stating that pre-operative hormonal therapy does not improve surgical outcomes[iii].

The case highlights the importance of multi-specialist collaborative approach with effective use of pre-emptive management strategies and thorough surgical workup. It differs to others in the supporting literature, as we did not use a combined laparoscopic and cystoscopic resection. Our management reflects current best practice guidelines.

Anatomical Mapping Of Deep Infiltrating Endometriosis In Accordance With The CORDES Statement

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Background: To review our understanding of histologically proven deeply infiltrating endometriosis (DIE) lesions, their anatomical distribution and relationship with pelvic or abdominal structures.

Methods: Prospective observational study from January 2009 to December 2016 in four advanced endoscopy units in Australia. Consecutive women with history of chronic pelvic pain who were scheduled for laparoscopic surgery and noted to have DIE lesions at the time of surgery were included in the analysis. Women underwent complete surgical excision and histological confirmation of DIE. DIE lesions were mapped in accordance with the CORDES statement. DIE lesions were further analysed into four different anatomical groups: 1. Abdominal or Pelvic; 2. Anterior or posterior; 3. Right or midline or left; 4. Unilateral or bilateral.

Results: In total, 379 consecutive women with suspicion of endometriosis underwent laparoscopy. 238 were excluded due to the presence of a negative laparoscopy (79) or superficial endometriosis only (156) at the time of surgery, or for incomplete data (3). Therefore 141 women with suspected DIE were included in the final analysis. There were 603 histologically proven DIE specimens in CORDES correlated locations: 28 pelvic sidewall lesions, 0 ureteric lesions, 41 Pouch of Douglas lesions, 179 rectal lesions, 69 sigmoid lesions, 18 bladder lesions, 204 uterosacral lesions, 7 cervical lesions, 39 vaginal lesions, and 18 other lesions (small intestine and appendix). DIE was more commonly found in the pelvis (n=585) than in the abdomen (n=18). Pelvic DIE was more often located posteriorly (n=567) than anteriorly (n=18). Pelvic DIE distribution was more frequently in the midline (n=20) than left (n=208) or right (n=125). Finally, if a woman had a lateral pelvic DIE lesion (n=137), it was usually unilateral (n=113, 82.5%) rather than bilateral (n=24, 17.5%), with 153 left sided lesions (55.6%) and 122 right sided lesions (44.4%).

Conclusion: Our findings demonstrate uneven distribution of DIE which supports the theory of retrograde menstruation leading to ectopic implantation of endometriosis. However, the degree of asymmetry is considerably less than that proposed in previous studies. The commonest sites of DIE were uterosacral ligaments and the rectum.

What Is The Anatomical Distribution Of Superficial Endometriosis In Women With Isolated Peritoneal Endometriosis?

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Background: To review our understanding of histologically proven superficial peritoneal endometriosis lesions, their anatomical distribution and relationship with pelvic or abdominal structures.

Methods: Prospective observational study from January 2009 to December 2016 in four advanced endoscopy units in Australia. Consecutive women with a history of chronic pelvic pain, laparoscopic confirmation of peritoneal or superficial endometriosis, complete surgical and histological data were included in the final analysis. Lesions were analysed into four different anatomical group classifications: 1. Abdominal or pelvic, 2. Anterior or posterior, 3. Right or midline or left, 4. Unilateral or bilateral.

Results: In total, 379 consecutive women with suspicion of endometriosis underwent laparoscopy. 223 were excluded either due to the presence of a negative laparoscopy (79) or deep infiltrating endometriosis (141) at the time of surgery. Therefore 159 women with peritoneal endometriosis only were included in the final analysis. In total 1,311 specimens or clusters of specimens were excised for histological assessment at the time of laparoscopy. Pre-identified anatomical locations included: 8 anterior abdominal wall lesions, 0 diaphragm lesions, 1 large bowel lesion, 0 small bowel lesions, 7 appendiceal lesions, 322 pouch of Douglas lesions, 21 rectal lesions, 32 cervical lesions, 425 uterosacral lesions, 62 uterovesical lesions, 416 pelvic sidewall lesions, 13 ovarian lesions, 0 salpingeal lesions and 4 round ligament lesions. Superficial endometriosis was more commonly found in the pelvis (n=1295) compared to the abdomen (n=16). Pelvic peritoneal lesions were more often located posteriorly (n=1233) than anteriorly (n=62). Pelvic peritoneal deposits were more commonly in the lateral compartments, left side (n=532), more than right side (n=470), than in the midline (n=381). Of 136 women with laterally located pelvic lesions, 56.6% had bilateral lesions (n=77), 30.1% (n=41) had left sided only lesions, and 13.2% (n=18) had only right sided lesions.

Conclusion: Our findings demonstrate an uneven distribution of peritoneal endometriosis in women with isolated superficial disease which supports the theory of retrograde menstruation, with left sided pelvic lesions being the most common.

Correlation Or Causation? A Case Report Of Endometriosis Within A Caesarean Scar Defect

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Background: Caesarean scar defect is a well-recognised complication of caesarean section (1, 2). It can cause secondary infertility, likely related to the unfavourable environment created by chronic inflammation and the effects of retained menstrual blood, which can affect cervical mucous, sperm transport and implantation, although the mechanism is still poorly understood (3).

Case: We present the case of a 38-year-old G3P1A2 lady presenting with secondary infertility, referred by her reproductive endocrinologist for a second opinion, and subsequently diagnosed with a caesarean scar defect on transvaginal ultrasound. During laparoscopy performed with concurrent hysteroscopy, the caesarean scar defect was found to be continuous with an endometriotic nodule in the uterovesical peritoneum. This was excised along with other endometriosis implants, and histopathology of the resected defect also showed endometriosis.

Discussion: These findings raise consideration for additional mechanisms of infertility in similar patients, factoring in endometriosis as a predisposing factor, consequence or co-existing factor. Such information may be relevant to fertility specialists and gynaecologists when considered treatment options in women with caesarean scar defects, secondary infertility, and unsuccessful IVF.

Conclusion: This case also highlights the benefit of laparoscopy over hysteroscopy alone in the management of caesarean scar defect, to allow additional treatment of coexisting pathology, such as endometriosis, that could also contribute to infertility.

1. Bij de Vaate A, Van der Voet L, Naji O, Witmer M, Veersema S, Brölmann H, et al. Prevalence, potential risk factors for development and symptoms related to the presence of uterine niches following Cesarean section: systematic review. Ultrasound in Obstetrics & Gynecology. 2014;43(4):372-82.
2. Francois K, Foley M. Antepartum and postpartum hemorrhage. In: Gabbe S, editor. Obstetrics: Normal and Problem Pregnancies. 5th edition ed. Philadelphia, PA: Churchill Livingston Elsevier; 2007.
3. Tower AM, Frishman GN. Cesarean Scar Defects: An Underrecognized Cause of Abnormal Uterine Bleeding and Other Gynecologic Complications. The Journal of Minimally Invasive Gynecology. 2013;20(5):562-72.

The Implications And Outcomes Of A Uterine Fibroid Variant Diagnosis At Surgery: A Twelve Year Review In A Tertiary Hospital

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Rationale: There has been worldwide guidance from gynecological societies in the wake of the 2014 FDA statement to avoid fibroid morcellation in the high risk patient. This is achieved by identifying pre-operative patient characteristics, investigations, and 'red flags' that increase the likelihood of occult malignancy. It is recognized in literature that benign fibroid variants can occasionally exhibit metastatic behavior. However there is limited evidence to guide clinical decision making or patient counseling following histopathological diagnosis of a benign fibroid variant especially in the setting of morcellation. Moreover, the implication of this diagnosis with regards to recurrence and follow up is uncertain.

Method/Results: We conducted a retrospective review from 2004 – 2016 of all patients who underwent uterine surgery for symptomatic fibroids under general gynaecology at the RWH. Fibroid variants with histopathological diagnosis of epithelioid, symplastic, cellular, mitotically active, intravascular (IV) invasion and Smooth muscle tumour of unknown malignant potential (STUMP) were all included. Groups were subdivided to identify if any particular group of variant was more likely to have recurrence or metastatic behavior. Data from 2014 and 2015 (post FDA statement) was compared to the previous 10years with regards to demographics, workup, surgical approach and follow up.

Over 12 years 1878 operations for symptomatic fibroids were performed and 128 benign variants (6.8%) and 5 STUMPs (0.26%) identified. The majority of these women were pre-menopausal, presenting with menorrhagia and pressure symptoms. Of the benign variants, 3 types had recurrences between 1-6yrs post-operatively. From 2004 – 2013 1149 operations were performed with 90 fibroid variants identified (incidence 7.83%) and from 2014-2016 729 operations were performed with 37 variants identified (incidence of 5.07%). There was a significant increase in histopathological diagnosis of IV invasion/IV leiomyomyomatosis from 0.6% pre 2014, compared with 2.0% from 2014-2016.

Conclusion: Most variant patients were discharged at their 6 week review with reassurance of benign diagnosis with no specific follow up advised. All STUMP patients were referred to Gynaeoncology for review/follow up. More aggressive behavior was associated with certain supgroups especially epitheloid and cellular. Since 2014 the incidence of intravascular/IV leiomyomatosis has increased. However to date, future follow up advice regarding a benign fibroid diagnosis has not significantly changed.

Correlation Between Laparoscopic Macroscopic Appearance Of Superficial Endometriosis And Histopathological Confirmation

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Objective: To determine correlation between macroscopic appearances of superficial endometriotic lesions noted at laparoscopy and the final histopathology diagnosis.

Methods: A prospective cohort study involving consecutive women with chronic pelvic pain who underwent laparoscopy between January 2015 - December 2016. The laparoscopic findings were recorded in terms of location, number and morphological description (i.e. red spot, white spot, pocket and/or fibrous adhesion) of the endometriotic lesions. These findings were correlated with the final histopathological diagnosis. All endometriotic lesions were excised at the time of laparoscopy.

Result: A total of 77 consecutive women underwent laparoscopy. 9/77 were noted to have deep infiltrating endometriosis with bowel involvement and were excluded. 4/77 had a negative laparoscopy with normal pelvis. 64/77 had visualised lesions suspicious of superficial endometriosis. The mean age of the women was 27.7±7.7 y, 37% were nulliparous, 27.5% had previous history of endometriosis. A total of 180 biopsies were collected .The description of lesion were: red spots74/180, white spot 87/180, peritoneal pocket 11/180 and adhesions 8/180. Overall histopathological confirmation rate for endometriosis was 56%.There was no correlation between lesion distribution, morphology and positive diagnosis of endometriosis (p-value=0.8). These parameters were not statistically different in the presence of past history of endometriosis (p-value=0.19).

Conclusion: Although the numbers in this study are small, there is no correlation between the macroscopic appearance of superficial endometriosis lesions and gold standard histological confirmation.

And Then There Were Two - An Experience With Heterotopic Pregnancy In Tasmania

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Introduction: Heterotopic pregnancy (HP) is a very uncommon condition, defined as the presence of a simultaneously occurring intrauterine and ectopic pregnancy. The incidence is estimated at 1 in 30,000 spontaneous pregnancies[1], with an increase incidence in women with assisted reproduction[2]. Risk factors are similar to those for ectopic pregnancy[1]. Tasmania has recently seen a very high incidence within its small population, with five cases occurring over a period of two and a half years. We report a case series of five patients diagnosed with heterotopic pregnancy in Tasmania over this period, with the intention to identify commonalities amongst the presentations.

Case Descriptions: The five patients presented between February 2013 and May 2015. All women were between the age of 24 and 30 years and all were spontaneous conception. None of the women were nulliparous. Three women were of a normal BMI and two were overweight.
Regarding relevant previous medical and surgical histories; two women had previously had LLETZ procedures for cervical abnormalities, two had previously been treated for chlamydia, and one had previously had an ectopic pregnancy.
Four women presented to the Emergency Department with abdominal pain, with ultrasound revealing signs of heterotopic pregnancy. The remaining woman had been for an early scan, which showed areas suspicious for heterotopic pregnancy, but she was asymptomatic. All women eventually underwent laparoscopy with salpingotomy or salpingectomy. There were no intra operative or postoperative complications. Histopathology of the specimens confirmed the presence of ectopic in all 5 cases. Three women went on to have a live birth of the intrauterine pregnancies, two normal deliveries and one elective caesarean. The remaining two patients' pregnancies resulted in miscarriage.

Conclusion: The incidence of HP in Tasmania in this time interval was 1 in 2600 which is vastly different to the background rate[3]. There did not appear to be any features consistently similar across the five cases, perhaps there are further risk factors that we have yet to identify? A live birth rate of three out of five cases in this situation confirms that laparoscopic surgery for the ectopic pregnancy is a safe option in the case of heterotopic intrauterine pregnancy. We could not find any other published occurrences of high incidence populations like this one we have described in Tasmania.

1. Reece EA, Petrie RH, Sirmans MF, Finster M & Todd WD, 1983; Combined intrauterine and extrauterine gestations: a review. Am J Obstet Gynaecol. 146(3):323
2. Seeber BE, Barnhart KT, 2006; Suspected ectopic pregnancy. Obstet Gynaecol. 107 (2 PT 1):399
3. Australian Bureau of Statistics; Births by States and Territories. www.abs.gov.au.

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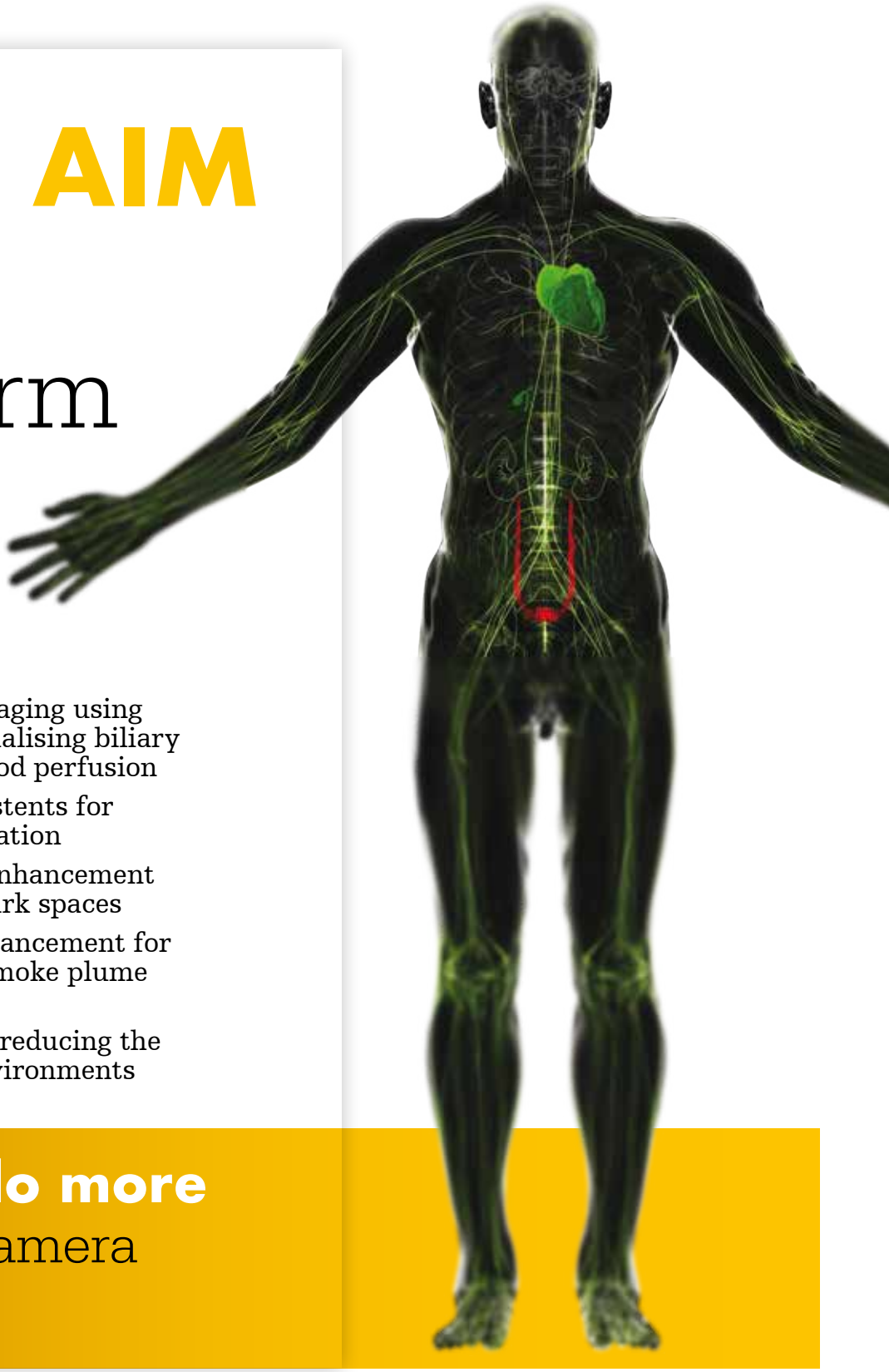

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