AGA26

55TH GLOBAL CONGRESS ON MIGS

BOSTON, MASSACHUSETTS
NOVEMBER 13-16, 2026

Syllabus

Panel 559

Lectures From Around the Globe: Global Voices and Smarter Systems: Accountability, Equity, and De-escalation

HONORARY CHAIR
Charles H. Koh, MD

SCIENTIFIC PROGRAM CHAIR
Nash S. Moawad, MD

PRESIDENT
Michael Hibner, MD, PhD



Table of Contents

Course Program: Course Description, Learning Objectives, Course Outline 3

Financial Disclosures 4

Beyond Awareness: When Women Are Finally Heard - How Women's Voices Are Reshaping Endometriosis Care, Surgical Accountability, and Health Policy
A. Harris 5

Would You Operate Differently If the World Were Watching? Surgical Coaching, Video Review, and Borderless Mentorship
A. Shyamsunder 8

Technological Innovation and Therapeutic De-Escalation: When Less Is Better
C. Exacoustos 11

From Expert Surgeons to Expert Systems: Standardizing Excellence In Minimally Invasive Gynecologic Surgery
L. Garcia 20

Beyond the Scale: Equitable, Patient-Centred Gynecologic Care for Women with Obesity and Atypical Hyperplasia or Endometrial Cancer
S. Kives 22

Cultural and Linguistic Competency & Implicit Bias 25

Panel-559: Lectures From Around the Globe:
Global Voices and Smarter Systems: Accountability, Equity, and De-escalation

Moderators: Richard Farnam, Deirdre Lum
Faculty: Luis F. Garcia (FEMEG, Mexico), Amani Harris (AGES, Australia and New Zealand), Sari Kives (CanSage, Canada), C. Exacoustos (SEGi, Italy), Akshara Shyamsunder (AGES, Australia and New Zealand)

Course Description

Perspectives from Australia, Italy, Mexico, and Canada examine how women's voices and technological progress can produce safer, more equitable, outcomes-driven care. The session connects advocacy and surgical accountability with technology-enabled therapeutic de-escalation, standardized systems, and a patient-centered model for women facing barriers to minimally invasive treatment.

Learning Objectives: *At the end of this course, the participant will be able to:* 1) Explain how women's lived experiences and advocacy can shape health policy, informed consent, and outcomes measurement in endometriosis care; 2) Compare surgical coaching, video review, and borderless mentorship as mechanisms for transparency and continuous improvement; 3) Evaluate how technological innovation can support evidence-based therapeutic de-escalation and individualized treatment; and 4) Identify system-level strategies to standardize MIGS excellence and deliver equitable, respectful care to patients facing treatment barriers.

Course Outline

2:00 pm	Welcome, Introduction and Course Overview	
2:05 pm	Beyond Awareness: When Women Are Finally Heard - How Women's Voices Are Reshaping Endometriosis Care, Surgical Accountability, and Health Policy	A. Harris
2:15 pm	Would You Operate Differently If the World Were Watching? Surgical Coaching, Video Review, and Borderless Mentorship	A. Shyamsunder
2:25 pm	Technological Innovation and Therapeutic De-escalation: When Less Is Better	C. Exacoustos
2:35 pm	From Expert Surgeons to Expert Systems: Standardizing Excellence in Minimally Invasive Gynecologic Surgery	L. Garcia
2:45 pm	Beyond the Scale: Equitable, Patient-Centered Gynecologic Care for Women with Obesity and Atypical Hyperplasia or Endometrial Cancer	S. Kives
2:55 pm	Discussion Questions & Answers	All faculty
3:00 pm	Adjourn	

ADA Statement: In accordance with the Americans with Disabilities Act (ADA), please contact CMEsupport@aagl.org should you require any special assistance.

Disclosure of Relevant Financial Relationships

As an ACCME-accredited provider, AAGL is responsible for ensuring that accredited education is fair, balanced, free of commercial bias, and supports safe, effective patient care. AAGL maintains control over all aspects of educational planning, content, faculty selection, delivery, and evaluation.

All individuals in a position to control educational content are required to disclose financial relationships with ACCME-defined ineligible companies within the past 24 months. AAGL identifies and mitigates all relevant financial relationships before individuals assume their respective roles. Educational content is also subject to independent peer review by individuals without relevant financial relationships.

Disclosure information and acknowledgment of any commercial support are provided to learners before the activity to promote transparency and maintain the independence and integrity of the education.

Asterisk (*) denotes no financial relationships with ACCME-defined ineligible companies to disclose.

PLANNER DISCLOSURES

The following members of AAGL have been involved in the educational planning and/or review of this course (listed in alphabetical order by last name).

PROFESSIONAL EDUCATION COMMITTEE

Harold Wu, MD* - Chairman
Adrian Balica, MD*
Jamal Mourad, DO – Proctor: Intuitive Surgical
Jude Okohue, MD*
Steven Radtke, MD*
Anna Reinert, MD*
Jean Uy-Kroh, MD*
Linda Bradley, MD, AAGL Medical Director*
Linda Michels, AAGL Executive Director*
Linda Bell, AAGL Admin Support*
Nancy Williams, COO, CME Consultants*

SCIENTIFIC PROGRAM COMMITTEE

Nash Moawad, MD, MS, Chairman – Consultant (ended 12/2024): Medtronic, Womed, Integra Life Sciences
Amani Harris, MD*
Ted Lee, MD – Advisory/Consultant: Johnson & Johnson, Regeneron Pharmaceuticals
Nucelio Lemos, MD, PhD – Speakers Bureau: Pfizer, Inc., Medtronic; Advisory Board: Knight Therapeutics, Vecfer Pharma
Mario Malzoni, MD*
Emad Mikhail, MD – Consultant: Johnson & Johnson
Hannah Palin, MD*
Megan Wasson, DO*
Michael Hibner, MD, PhD*
Jose "Tony" Carugno, MD*
Angela Chaudhari, MD - Consultant: Tag/Dream Medical, Johnson & Johnson; Speakers Bureau: Johnson & Johnson
Linda D. Bradley, MD, Medical Director*
Linda Michels, Executive Director, AAGL*

COURSE MODERATORS

Richard Farnam, MD – Consultant: Intuitive Surgical, Caldera Medical
Deirdre Lum, MD*

FACULTY DISCLOSURES

The following faculty have agreed to support their presentations and clinical recommendations with the best available evidence from the medical literature (in alphabetical order by last name).

Caterina Exacoustos, MD, PhD*
Luis F. Garcia, MD – Speakers Bureau: Johnson & Johnson
Amani Harris, MD*
Sari Kives, MD, FRCSC – Advisory Board: Pfizer, Abvie, Bayer
Akshara M. Shyamsunder, MBBS*

MITIGATION OF RELEVANT FINANCIAL RELATIONSHIPS

All relevant financial relationships have been mitigated.

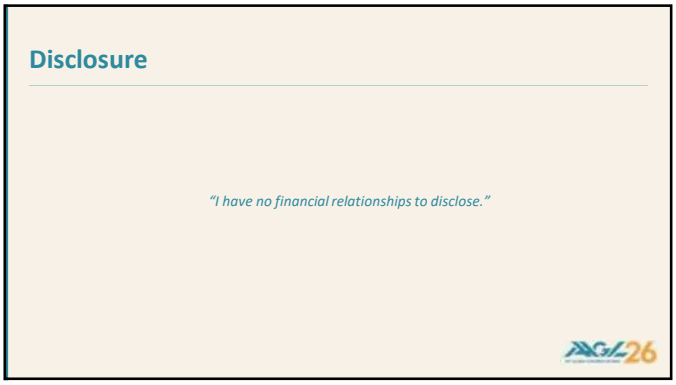
Drs. Lee, Lemos, Mikhail, and Chaudhari's planning decisions, as part of the Scientific Program Committee (SPC), were peer reviewed by other planners on the SPC who had disclosed no financial relationships with ineligible companies, and found to be fair, balanced, and free of commercial bias. Dr. Moawad's financial relationships ended 12/2024, thus mitigating them. For most of his AAGL Professional Education Committee service, Dr. Mourad had no financial relationships to disclose. He recently disclosed a new relationship as a Proctor for Intuitive Surgical. Since then, he has not participated in activities involving control or influence over accredited educational content; therefore, no additional mitigation was necessary.

Dr. Farnam's role as co-moderator is limited to facilitating educational discussions rather than developing or presenting clinical content. All moderators attested to maintaining balance, independence, objectivity, and scientific rigor; ensuring that educational content remains free of commercial bias; and supporting clinical recommendations with the best available evidence. These measures help safeguard the independence and integrity of the accredited education.

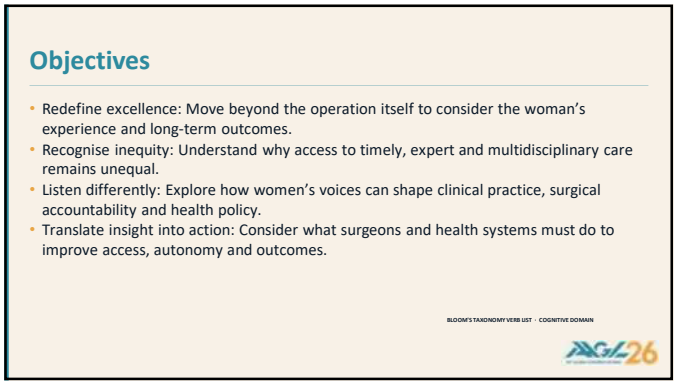
The presentation content for course faculty, Drs. Garcia and Kives, has been peer reviewed and found to be fair, balanced, and free from commercial bias.


Beyond Awareness: When Women Are Finally Heard
How Women's Voices Are Reshaping Endometriosis Care, Surgical Accountability, And Health Policy
Dr Amani Harris, MD · Sydney Minimally Invasive Gynaecologic Surgery (SMIGS)
NOVEMBER 13-16, 2026 · BOSTON · #AAGL26

1


Disclosure
"I have no financial relationships to disclose."

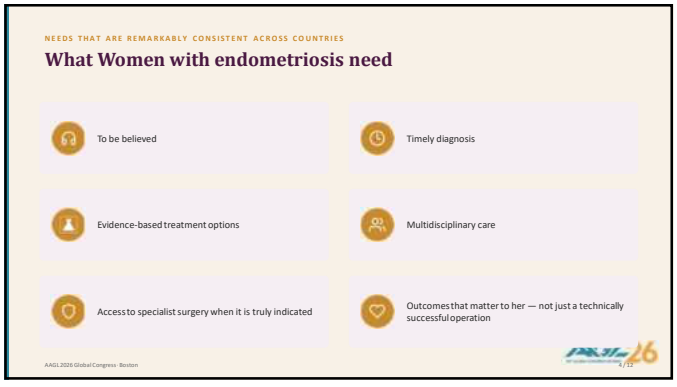
2


Objectives
Redefine excellence: Move beyond the operation itself to consider the woman's experience and long-term outcomes.
Recognise inequity: Understand why access to timely, expert and multidisciplinary care remains unequal.
Listen differently: Explore how women's voices can shape clinical practice, surgical accountability and health policy.
Translate insight into action: Consider what surgeons and health systems must do to improve access, autonomy and outcomes.
BLOOM'S TAXONOMY VERB LIST · COGNITIVE DOMAIN

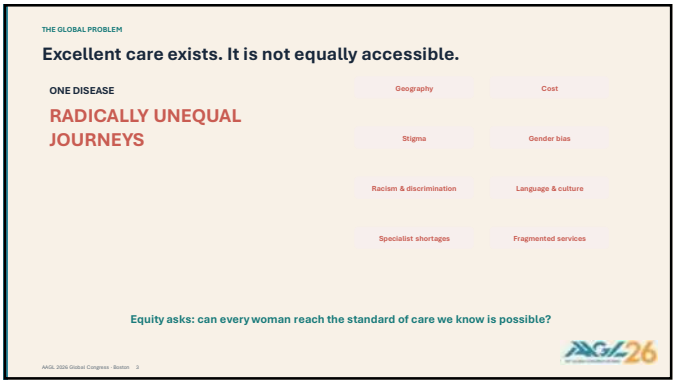
3


THE GLOBAL PROBLEM
One Disease, Radically Unequal Journeys
190M
women and girls affected worldwide — roughly 1 in 10 of reproductive age (WHO)
4–12
years is the average time to diagnosis, globally (WHO)
0.038%
of the 2022 US NIH budget funded research into a disease affecting 6.5M American women
A woman in Boston, Sydney, Nairobi or Mumbai can carry the same disease — and a completely different pathway to care.
AAGL 2026 Global Congress · Boston

4


NEEDS THAT ARE REMARKABLY CONSISTENT ACROSS COUNTRIES
What Women with endometriosis need
To be believed
Timely diagnosis
Evidence-based treatment options
Multidisciplinary care
Access to specialist surgery when it is truly indicated
Outcomes that matter to her — not just a technically successful operation
AAGL 2026 Global Congress · Boston

5


THE GLOBAL PROBLEM
Excellent care exists. It is not equally accessible.
ONE DISEASE
RADICALLY UNEQUAL JOURNEYS
Geography
Cost
Stigma
Gender bias
Racism & discrimination
Language & culture
Specialist shortages
Fragmented services
Equity asks: can every woman reach the standard of care we know is possible?
AAGL 2026 Global Congress · Boston

6

REDEFINING EXCELLENCE

Excellent endometriosis care is a system—not a procedure.

Recognition → Diagnosis → Medical treatment → Multidisciplinary care → Surgery when indicated → Long-term follow-up → Patient-reported outcomes

The best surgeon cannot compensate for a system that cannot provide the care before and after surgery.

SURGERY IS ESSENTIAL—BUT IT IS ONE COMPONENT OF CARE

7

THE PATHWAY

How women's voices become system change

Lived experience → Advocacy → Evidence → Policy → Funding → Care

Australia is a case study—not a blueprint.

The transferable lesson is the mechanism: listening must lead to action.

8

AUSTRALIA'S FIRST-EVER PARLIAMENTARY INQUIRY INTO WOMEN'S PAIN

A Case Study, Not a Blueprint: Australia's Experience

13,000+
personal submissions to the Victorian Parliamentary Inquiry into Women's Pain (2024)

27
recommendations delivered to government

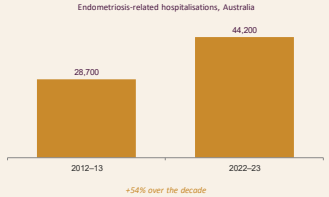
7
areas of reform: research, workforce, models of care, affordable healthcare, education, policy, cultural change

A parliamentary inquiry is a formal process for gathering public evidence to inform government policy — this was Australia's first devoted specifically to women's pain.

9

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE, ENDOMETRIOSIS REPORT (2025 UPDATE)

When Lived Experience Becomes National Data



1 in 7
women born 1973–78 diagnosed with endometriosis by age 44–49

$293M
annual health-system spend in 2022–23 — more than double 2013–14 ($142M)

#3
leading cause of non-fatal disease burden among reproductive-age women, after genital prolapse and PCOS

10

POLICY BECAME FUNDING

From Listening to Investment

$127M
national endometriosis investment committed under the National Action Plan

33
government-funded Endometriosis and Pelvic Pain Clinics established nationally

$50M
Ainsworth philanthropic investment in endometriosis research capacity

PBS
expanded subsidised access to newer medical therapies, widening options beyond surgery

11

FROM POLICY TO PATIENT

What the investment is trying to deliver

Primary care · Physiotherapy · **THE WOMAN** · Medical options · Pain medicine · Specialist surgery

Autonomy requires options—not a single pathway.

12

WHAT THE DATA AND THE CLINICS STILL CANNOT FIX

Progress Is Not Yet Equity

- Public patients still struggle to access allied health — physiotherapy, psychology, pain medicine
- Pain services are overwhelmed; waiting lists remain long
- Specialist surgical capacity is limited relative to demand
- Rural, remote and Indigenous communities face compounding access barriers
- Socioeconomic disadvantage still predicts who reaches multidisciplinary care

13

THE SURGEON'S RESPONSIBILITY, REFRAMED FOR THIS CONGRESS THEME

Surgical Excellence Redefined

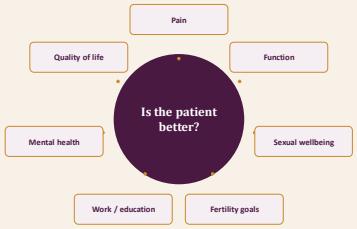
- RIGHT PATIENT
- RIGHT INDICATION
- RIGHT OPERATION
- RIGHT OUTCOME

Not simply "Can I do it?" — but "Should I, and did it help her?"

14

OUTCOMES-DRIVEN CARE, FROM THIS CONGRESS THEME, IN PRACTICE

Are We Measuring What Matters to Her?



15

WHAT WOULD CHANGE IF WE TRULY LISTENED?

A Global Call to Action

1. Can every woman access timely diagnosis?
2. Can every woman access multidisciplinary care?
3. Can every woman make informed choices — including the choice not to have surgery?
4. Can we measure whether the care we provide actually improves her life?

16

References

- World Health Organization. Endometriosis. Fact sheet. Geneva: World Health Organization; 2025. https://www.who.int/news-room/fact-sheets/detail/endometriosis
- Zondervan KT, Becker CM, Missmer SA. Endometriosis. New England Journal of Medicine. 2020;382:1244–1256. doi:10.1056/NEJMra1810764
- Taylor HS, Kotlyar AM, Flores VA. Endometriosis is a chronic systemic disease: clinical challenges and novel innovations. The Lancet. 2021;397:839–852. doi:10.1016/S0140-6736(21)00389-5
- Nnoaham KE, Hummelshoj L, Webster P, et al. Impact of endometriosis on quality of life and work productivity: a multicenter study across ten countries. Fertility and Sterility. 2011;96:366–373.e8. doi:10.1016/j.fertnstert.2011.05.090
- Australian Institute of Health and Welfare. Endometriosis. Canberra: AIHW; 2025. https://www.aihw.gov.au/reports/chronic-disease/endometriosis
- Australian Institute of Health and Welfare. Australian Burden of Disease Study 2024. Canberra: AIHW; 2024. https://www.aihw.gov.au/reports/burden-of-disease/australian-burden-of-disease-study-2024
- Australian Institute of Health and Welfare. Health system spending on disease and injury in Australia 2022–23. Canberra: AIHW; 2024. https://www.aihw.gov.au/reports/health-welfare-expenditure/health-system-spending-on-disease-and-injury-in-australia-2022-23
- Victorian Department of Health, Safer Care Victoria. Bridging the Gender Pain Gap: The Inquiry into Women's Pain Report 2025. Melbourne: State of Victoria; 2025. https://www.health.vic.gov.au/sites/default/files/2025-11/bridging-the-gender-pain-gap-pain-inquiry-report.pdf
- Australian Government Department of Health and Aged Care. National Action Plan for Endometriosis. Canberra: Australian Government; 2018. https://www.health.gov.au/our-work/national-action-plan-for-endometriosis
- Australian Government Department of Health and Aged Care. What we're doing about endometriosis. Canberra: Australian Government; 2026. https://www.health.gov.au/topics/chronic-conditions/what-were-doing-about-chronic-conditions/what-were-doing-about-endometriosis
- Australian Government Department of Health and Aged Care. Endometriosis and Pelvic Pain Clinics. Canberra: Australian Government; 2026. https://www.health.gov.au/our-work/endometriosis-and-pelvic-pain-clinics
- University of New South Wales. Landmark donation powers world-first endometriosis research institute at UNSW. Sydney: UNSW; 2025. https://www.unsw.edu.au/newsroom/news/2025/05/landmark-donation-powers-world-first-endometriosis-research-institute-at-UNSW
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Australian Living Evidence Guideline: Endometriosis. Melbourne: RANZCOG; 2025. https://ranzcog.edu.au/wp-content/uploads/Endometriosis-Clinical-Practice-Guideline.pdf
- Becker CM, Bokor A, Heikinheimo O, et al. ESHRE guideline: endometriosis. Human Reproduction Open. 2022;2022(2):hoac009. doi:10.1093/hropen/hoac009
- Duffy JMN, Arambage K, Correa FJS, et al. Laparoscopic surgery for endometriosis. Cochrane Database of Systematic Reviews. 2014;2014(4):CD011031. doi:10.1002/14651858.CD011031.pub2

17

Would you operate differently if every case were recorded, reviewed, and discussed by someone you deeply respected?

Surgical training produces independence.
What should happen after independence?

AKSHARA SHYAMSUNDER
THE ROYAL HOSPITAL FOR WOMEN - SYDNEY, NSW
BANNER UNIVERSITY MEDICAL CENTER - PHOENIX, AZ

1

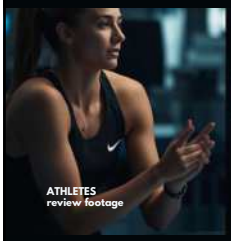
DISCLOSURES

I have no financial relationships to disclose

2

THE PERFORMANCE PARADOX

Everyone reviews. Except surgeons.


ATHLETES
review footage


PILOTS
debrief


SURGEONS
may never watch themselves

3

THE INDEPENDENCE PARADOX

Independence is not the finish line.



NOVICE
highly observed

INDEPENDENT
less observed

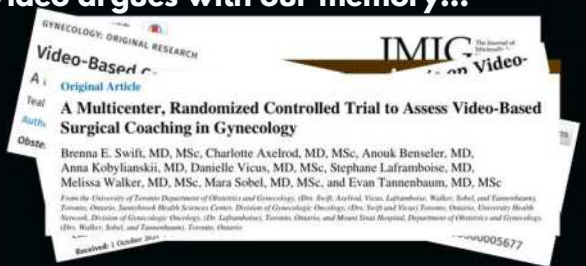
EXPERT
rarely observed

Responsibility increases as observation decreases

4

EVIDENCE → OBSERVATION → CHANGE

Video argues with our memory...


GYNECOLOGY: ORIGINAL RESEARCH

Original Article

A Multicenter, Randomized Controlled Trial to Assess Video-Based Surgical Coaching in Gynecology

Brenna E. Swift, MD, MSc, Charlotte Axelrod, MD, MSc, Anouk Benseler, MD, Anna Kobylianskii, MD, Danielle Vicus, MD, MSc, Stephane Laframboise, MD, Melissa Walker, MD, MSc, Mara Sobel, MD, MSc, and Evan Tannenbaum, MD, MSc

Randomised trials and systematic reviews show improved technical performance. Recent gynaecologic evidence reports improved operative assessment scores after video-based coaching.

5

COACHING EXPANDS THE FIELD OF VIEW

Coaching changes the question





NOT Remediation. NOT Failure. YES Performance Optimisation

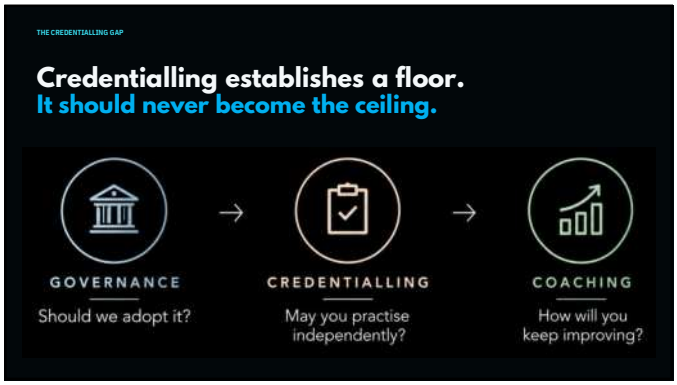
6


AGES SURGICAL COACHING PROGRAMME
Australasian Gynaecological Endoscopy & Surgery Society Limited
TRAIN
THE COACH
MATCH
THE SURGEON
REVIEW
THE OPERATION
GOVERN
THE PROGRAM
Formal preparation
COACHING IS A LEARNED SKILL
Confidential 1:1 relationship
PSYCHOLOGICAL SAFETY MATTERS
Structured operative video review
THE OPERATION BECOMES THE CLASSROOM
Society oversight
TRUST REQUIRES INFRASTRUCTURE

7


RANZCOG'S 2026 ROBOTIC GUIDELINE
Robotics makes the problem visible
RESPONSIBLE ADOPTION
• Patient selection
• Consent
• Equity
• Audit
• Sustainability
How does an independently credentialled surgeon continue improving?
Robotics is the stress test for this argument

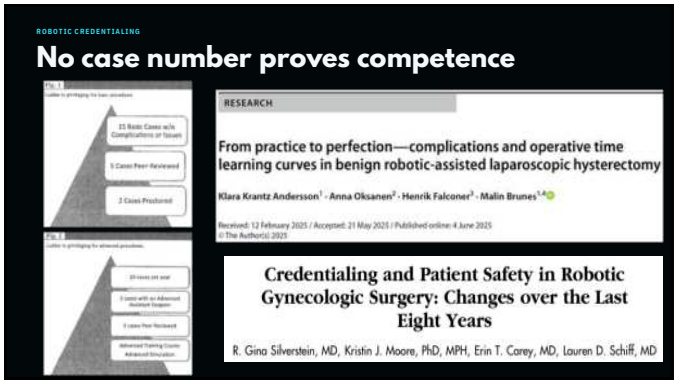
8


THE CREDENTIALLING GAP
Credentialling establishes a floor.
It should never become the ceiling.
GOVERNANCE
Should we adopt it?
CREDENTIALLING
May you practise independently?
COACHING
How will you keep improving?

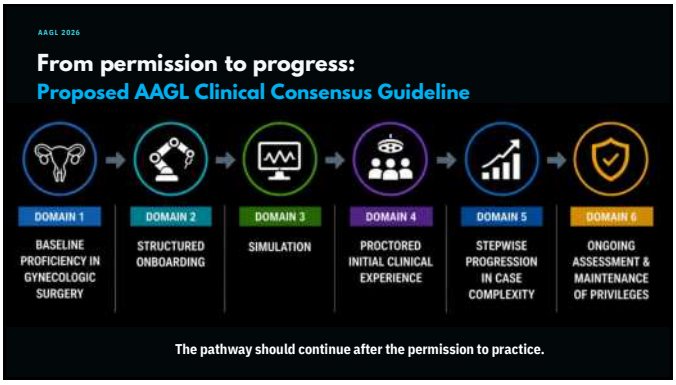
9


VOLUME IS A PROXY – NOT PROOF
CASES
≠
COMPETENCE
Platform training
Simulation
Case numbers
Proctored procedures
Demonstrated capability
Observed performance
Sound judgment
Safe independence
Competence must be demonstrated, not inferred from repetition.

10


ROBOTIC CREDENTIALING
No case number proves competence
RESEARCH
From practice to perfection—complications and operative time learning curves in benign robotic-assisted laparoscopic hysterectomy
Credentialing and Patient Safety in Robotic Gynecologic Surgery: Changes over the Last Eight Years
R. Gina Silverstein, MD, Kristin J. Moore, PhD, MPH, Erin T. Carey, MD, Lauren D. Schiff, MD

11


AAGL 2026
From permission to progress:
Proposed AAGL Clinical Consensus Guideline
DOMAIN 1
BASELINE PROFICIENCY IN GYNECOLOGIC SURGERY
DOMAIN 2
STRUCTURED ONBOARDING
DOMAIN 3
SIMULATION
DOMAIN 4
PROCTORED INITIAL CLINICAL EXPERIENCE
DOMAIN 5
STEPWISE PROGRESSION IN CASE COMPLEXITY
DOMAIN 6
ONGOING ASSESSMENT & MAINTENANCE OF PRIVILEGES
The pathway should continue after the permission to practice.

12

THE THREE QUESTIONS

CAN YOU?

MAY YOU?

ARE YOU STILL?

13

THE FEEDBACK LOOP



14

THE FUTURE SURGEON IS COMPETENT · CONNECTED · COACHABLE

Would you operate differently if the world was watching?

We do not need more surveillance.
We need visibility.

15

References

AAGL Advancing Minimally Invasive Gynecology Worldwide (2013) 'AAGL position statement: Robotic-assisted laparoscopic surgery in benign gynecology', *Journal of Minimally Invasive Gynecology*, 20(1), pp. 2–9. doi: 10.1016/j.jmig.2012.12.007.

AAGL Advancing Minimally Invasive Gynecology Worldwide (2014) 'Guidelines for privileging for robotic-assisted gynecologic laparoscopy', *Journal of Minimally Invasive Gynecology*, 21(2), pp. 157–167. doi: 10.1016/j.jmig.2014.01.024.

Anderson, S.M., Gillanders, S., Hickey, A., Offiah, G. and Davis, N. (2025) 'Video killed the radio star—a meta-analysis on video-based coaching to improve surgical skill', *World Journal of Surgery*, 49(3), pp. 634–642. doi: 10.1002/wjs.12494.

Andersson, K.K., Oksanen, A., Falconer, H. and Brunes, M., 2025. From practice to perfection—complications and operative time learning curves in benign robotic-assisted laparoscopic hysterectomy. *Journal of Robotic Surgery*, *19*(1), p.264.

Augestad, K.M., Butt, K., Ignjatovic, D., Keller, D.S. and Kiran, R. (2020) 'Video-based coaching in surgical education: a systematic review and meta-analysis', *Surgical Endoscopy*, 34(2), pp. 521–535. doi: 10.1007/s00464-019-07265-0.

Goh, A.C., Goldfarb, D.W., Sander, J.C., Miles, B.J. and Dunkin, B.J. (2012) 'Global evaluative assessment of robotic skills: validation of a clinical assessment tool to measure robotic surgical skills', *Journal of Urology*, 187(1), pp. 247–252. doi: 10.1016/j.juro.2011.09.032.

Harris, M., Mohan, H., Martins, B.A.A., Essani, R., Saklani, A. and Harji, D. (2026) 'Training and credentialing in robotic general surgery', *International Journal of Colorectal Disease*, 41, article 111. doi: 10.1007/s00384-026-05129-3

Lenihan, J.P. Jr., Kovanda, C. and Seshadri-Kreaden, U. (2008) 'What is the learning curve for robotic assisted gynecologic surgery?', *Journal of Minimally Invasive Gynecology*, 15(5), pp. 589–594. doi: 10.1016/j.jmig.2008.06.015.

Martin, J.A., Regehr, G., Reznick, R., MacRae, H., Murnaghan, J., Hutchison, C. and Brown, M. (1997) 'Objective structured assessment of technical skill (OSATS) for surgical residents', *British Journal of Surgery*, 84(2), pp. 273–278. **Muir, T.M., Pruszynski, J., Kho, K.A., Ramirez, C.I., Donnellan, N.M. and Chao, L. (2024)** 'Video-based coaching for laparoscopic salpingectomy: a randomized controlled trial', *Obstetrics & Gynecology*, 144(3), pp. 358–365. doi: 10.1097/AOG.0000000000005677.

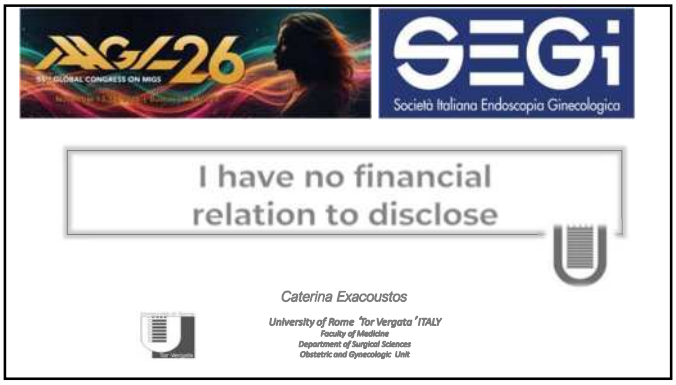
Silverstein, R.G., Moore, K.J., Carey, E.T. and Schiff, L.D. (2023) 'Credentialing and patient safety in robotic gynecologic surgery: changes over the last eight years', *JSLS: Journal of the Society of Laparoscopic & Robotic Surgeons*, 27(2), e2023.00007. doi: 10.4293/JSLS.2023.00007.

Swift, B.E., Axelrod, C., Benseler, A., Kobylianskii, A., Vicus, D., Laframboise, S., Waller, M., Sobel, M. and Tannenbaum, E. (2025) 'A multicenter, randomized controlled trial to assess video-based surgical coaching in gynecology', *Journal of Minimally Invasive Gynecology*, 32(8), pp. 701–708.e1. doi: 10.1016/j.jmig.2025.03.001.

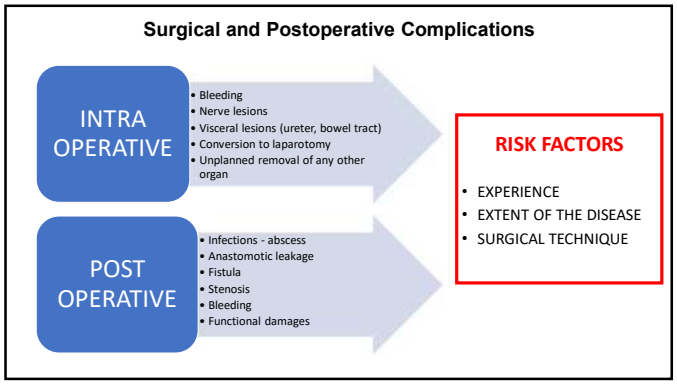
16


AGL26
SEGI
Società Italiana Endoscopia Ginecologica
TECHNOLOGICAL INNOVATION and THERAPEUTIC DE-ESCALATION: WHEN LESS IS BETTER
Caterina Exacoustos
University of Rome "Tor Vergata" ITALY
Faculty of Medicine
Department of Surgical Sciences
Obstetric and Gynecologic Unit

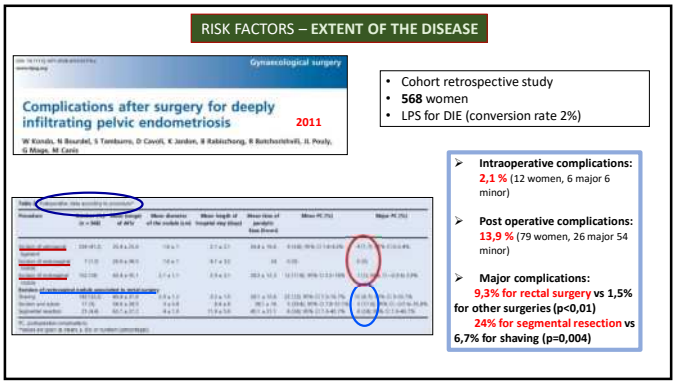
1


AGL26
SEGI
Società Italiana Endoscopia Ginecologica
I have no financial relation to disclose
Caterina Exacoustos
University of Rome "Tor Vergata" ITALY
Faculty of Medicine
Department of Surgical Sciences
Obstetric and Gynecologic Unit

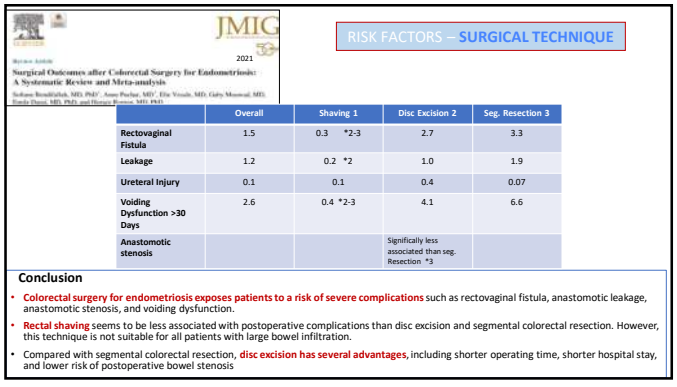
2


Surgical and Postoperative Complications
INTRA OPERATIVE
• Bleeding
• Nerve lesions
• Visceral lesions (ureter, bowel tract)
• Conversion to laparotomy
• Unplanned removal of any other organ
POST OPERATIVE
• Infections - abscess
• Anastomotic leakage
• Fistula
• Stenosis
• Bleeding
• Functional damages
RISK FACTORS
• EXPERIENCE
• EXTENT OF THE DISEASE
• SURGICAL TECHNIQUE

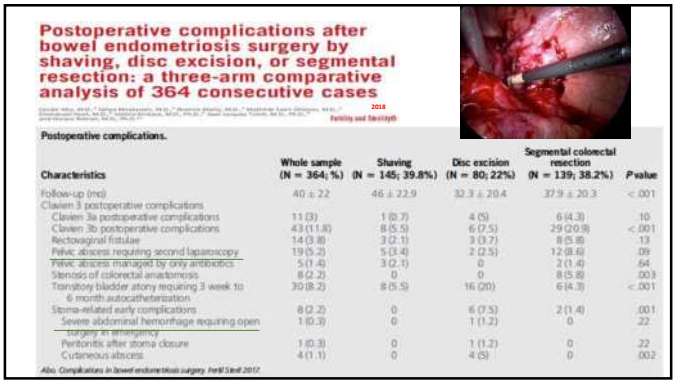
3


RISK FACTORS – EXTENT OF THE DISEASE
Gynaecological surgery
Complications after surgery for deeply infiltrating pelvic endometriosis
2011
• Cohort retrospective study
• 568 women
• LPS for DIE (conversion rate 2%)
Intraoperative complications: 2,1 % (12 women, 6 major 6 minor)
Post operative complications: 13,9 % (79 women, 26 major 54 minor)
Major complications: 9,3% for rectal surgery vs 1,5% for other surgeries (p<0,01)
24% for segmental resection vs 6,7% for shaving (p=0,004)

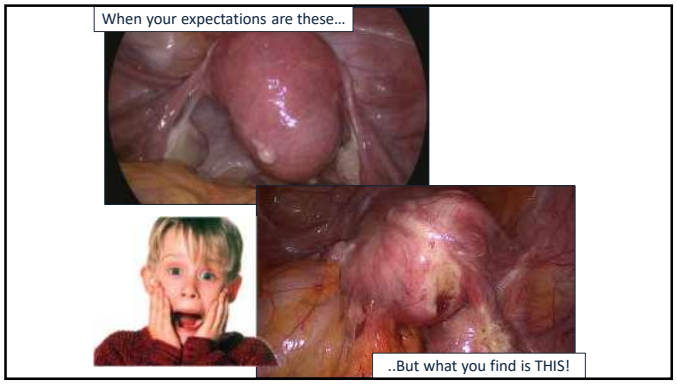
4


JMIG
2021
Surgical Outcomes after Colorectal Surgery for Endometriosis: A Systematic Review and Meta-analysis
RISK FACTORS – SURGICAL TECHNIQUE
Overall
Shaving 1
Disc Excision 2
Seg. Resection 3
Rectovaginal Fistula
1.5
0.3 *2-3
2.7
3.3
Leakage
1.2
0.2 *2
1.0
1.9
Ureteral Injury
0.1
0.1
0.4
0.07
Voiding Dysfunction >30 Days
2.6
0.4 *2-3
4.1
6.6
Anastomotic stenosis
Significally less associated than seg. Resection *3
Conclusion
• Colorectal surgery for endometriosis exposes patients to a risk of severe complications such as rectovaginal fistula, anastomotic leakage, anastomotic stenosis, and voiding dysfunction.
• Rectal shaving seems to be less associated with postoperative complications than disc excision and segmental colorectal resection. However, this technique is not suitable for all patients with large bowel infiltration.
• Compared with segmental colorectal resection, disc excision has several advantages, including shorter operating time, shorter hospital stay, and lower risk of postoperative bowel stenosis

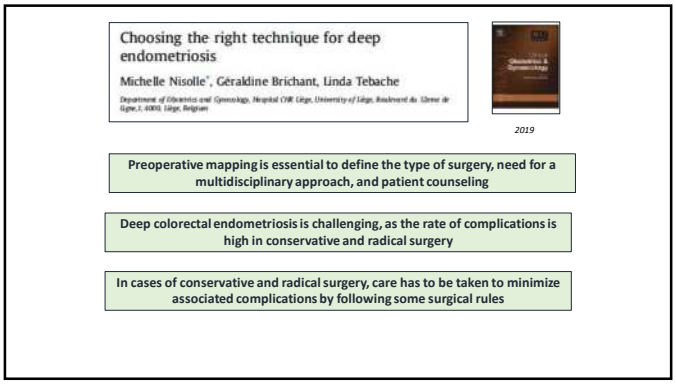
5


Postoperative complications after bowel endometriosis surgery by shaving, disc excision, or segmental resection: a three-arm comparative analysis of 364 consecutive cases
2018
Postoperative complications.
Characteristics
Whole sample (N = 364; %)
Shaving (N = 145; 39.8%)
Disc excision (N = 80; 22%)
Segmental colorectal resection (N = 139; 38.2%)
P value
Follow-up (mo)
40 ± 22
46 ± 22.9
32.3 ± 20.4
37.9 ± 20.3
< .001
Clavien 3 postoperative complications
Clavien 3a postoperative complications
11 (3)
1 (0.7)
4 (5)
6 (4.3)
.10
Clavien 3b postoperative complications
43 (11.8)
8 (5.5)
6 (7.5)
29 (20.9)
< .001
Rectovaginal fistulae
14 (3.8)
3 (2.1)
3 (3.7)
8 (5.8)
.13
Pelvic abscess requiring second laparoscopy
19 (5.2)
5 (3.4)
2 (2.5)
12 (8.6)
.09
Pelvic abscess managed by only antibiotics
5 (1.4)
3 (2.1)
0
2 (1.4)
.64
Stenosis of colorectal anastomosis
8 (2.2)
0
0
8 (5.8)
.003
Transitory bladder atony requiring 3 week to 6 month autocatheterization
30 (8.2)
8 (5.5)
16 (20)
6 (4.3)
< .001
Stoma-related early complications
8 (2.2)
0
6 (7.5)
2 (1.4)
.001
Severe abdominal hemorrhage requiring open surgery in emergency
1 (0.3)
0
1 (1.2)
0
.22
Peritonitis after stoma closure
1 (0.3)
0
1 (1.2)
0
.22
Cutaneous abscess
4 (1.1)
0
4 (5)
0
.002

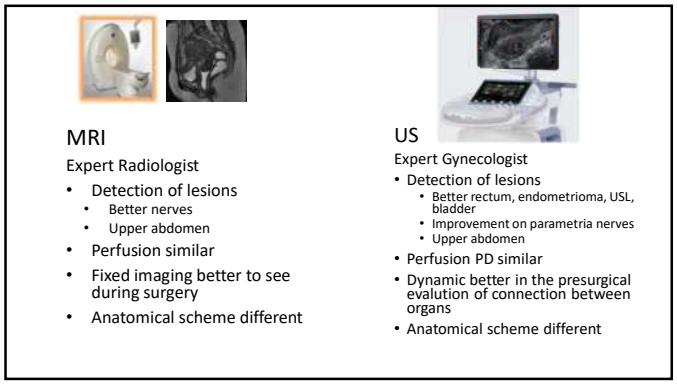
6


When your expectations are these…
..But what you find is THIS!

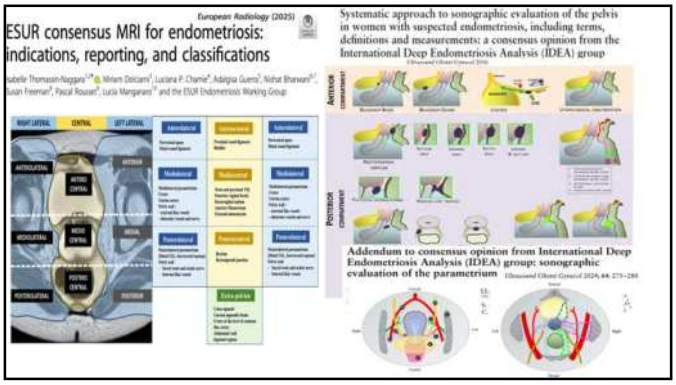
7


Choosing the right technique for deep endometriosis
Michelle Nisolle*, Géraldine Brichant, Linda Tebache
2019
Preoperative mapping is essential to define the type of surgery, need for a multidisciplinary approach, and patient counseling
Deep colorectal endometriosis is challenging, as the rate of complications is high in conservative and radical surgery
In cases of conservative and radical surgery, care has to be taken to minimize associated complications by following some surgical rules

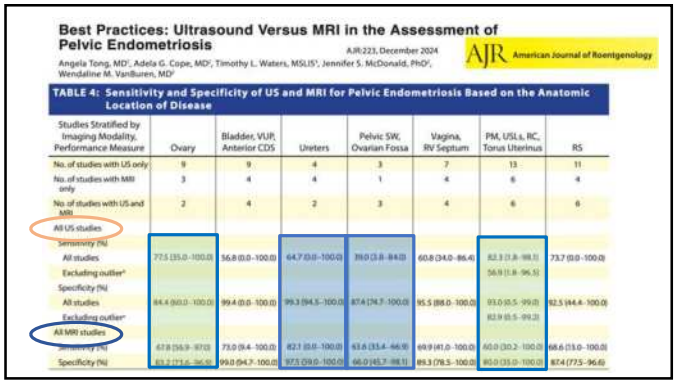
8


MRI
Expert Radiologist
• Detection of lesions
• Better nerves
• Upper abdomen
• Perfusion similar
• Fixed imaging better to see during surgery
• Anatomical scheme different
US
Expert Gynecologist
• Detection of lesions
• Better rectum, endometrioma, USL, bladder
• Improvement on parametria nerves
• Upper abdomen
• Perfusion PD similar
• Dynamic better in the presurgical evalution of connection between organs
• Anatomical scheme different

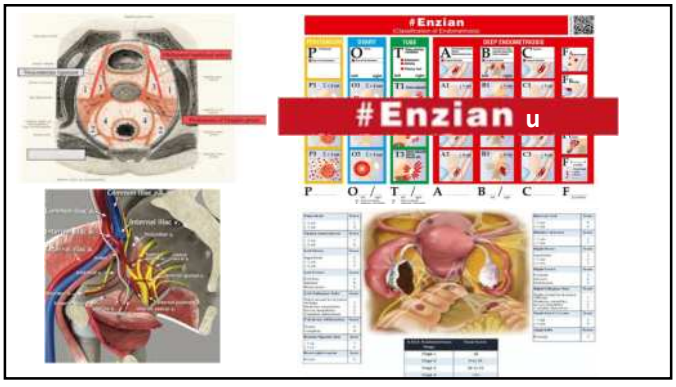
9


European Radiology (2025)
ESUR consensus MRI for endometriosis: indications, reporting, and classifications
Systematic approach to sonographic evaluation of the pelvis in women with suspected endometriosis, including terms, definitions and measurements: a consensus opinion from the International Deep Endometriosis Analysis (IDEA) group
Addendum to consensus opinion from International Deep Endometriosis Analysis (IDEA) group: sonographic evaluation of the parametrium

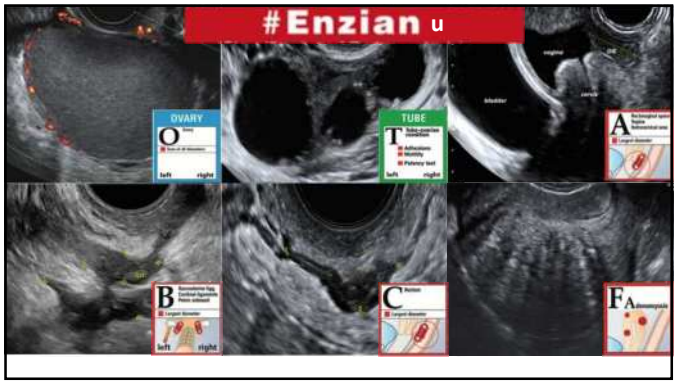
10


Best Practices: Ultrasound Versus MRI in the Assessment of Pelvic Endometriosis
AJR:223, December 2024
AJR American Journal of Roentgenology
TABLE 4: Sensitivity and Specificity of US and MRI for Pelvic Endometriosis Based on the Anatomic Location of Disease

11


#Enzian
#Enzian u

12



13

Comparison Between Sonography-Based and Surgical Evaluation of Endometriotic Lesions Using the #Enzian Classification – A Retrospective Data Analysis

Ultraschall in Med 2023;

#Enzian compartment	Sensitivity (95 % CI*)	Specificity (95 % CI*)
#Enzian FB (urinary bladder)	86 % (42 %–100 %)	100 % (96 %–100 %)
#Enzian FI (other intestinal locations)	100 % (80 %–100 %)	100 % (95 %–100 %)
#Enzian FU (ureters)	100 % (75 %–100 %)	100 % (95 %–100 %)
#Enzian FO (other location)	100 % (48 %–100 %)	98 % (92 %–100 %)
#Enzian A (vagina, retrocervical area, RVS**)	97 % (90 %–100 %)	86 % (64 %–97 %)
#Enzian B left (left USLs*, left parametria)	97 % (90 %–100 %)	70 % (47 %–87 %)
#Enzian B right (right USLs*, right parametria)	100 % (95 %–100 %)	90 % (70 %–99 %)
#Enzian C (rectum)	100 % (92 %–100 %)	96 % (86 %–100 %)
#Enzian O left (left ovary)	100 % (91 %–100 %)	96 % (87 %–100 %)
#Enzian O right (right ovary)	100 % (87 %–100 %)	100 % (94 %–100 %)

14

Concordance between Preoperative #ENZIANi Score and Postoperative #ENZIANs Score Classification—Why Do We Choose #ENZIAN and How Does It Impact the Future Classification Trend?

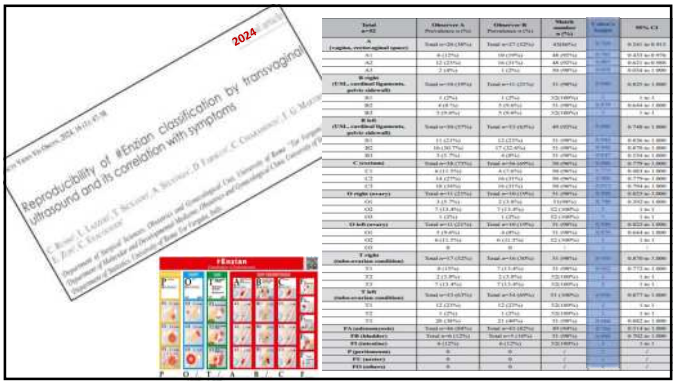
Journal of Clinical Medicine

J. Clin. Med. **2024**, *13*, 6005

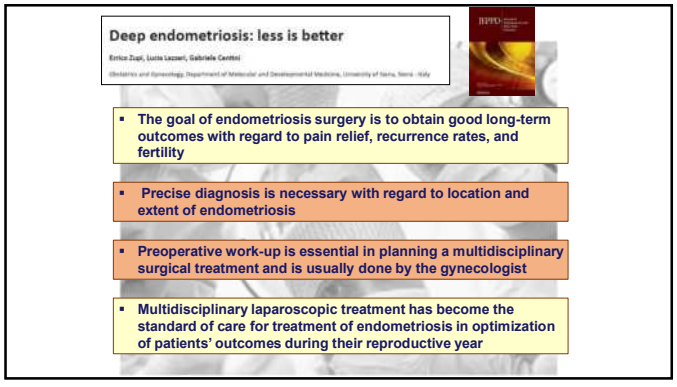
Zofia Borowiec *, Maja Mrugała, Krzysztof Nowak, Wiktor Bek and Ewa Milnerowicz-Nabzdyk

	Sensitivity, % (95% CI)	Specificity, % (95% CI)	Accuracy, % (95% CI)
P	**98.19 (95.82–99.41)**	83.33 (35.88–99.58)	97.87 (95.43–99.22)
O left	86.59 (80.40–91.40)	84.16 (75.55–90.67)	85.66 (80.85–89.65)
O right	87.32 (80.71–92.31)	88.72 (82.08–93.55)	88.00 (83.56–91.59)
T left	**96.93 (93.78–98.76)**	82.61 (68.58–92.18)	94.53 (91.13–96.90)
T right	**96.51 (93.23–98.48)**	84.44 (70.54–93.51)	94.53 (91.13–96.90)
A	**96.31 (93.11–98.30)**	83.33 (67.19–93.63)	94.64 (91.32–96.97)
B left	**93.55 (89.73–96.27)**	85.29 (68.94–95.05)	92.55 (88.84–95.33)
B right	**95.31 (91.96–97.55)**	80.77 (60.65–93.45)	93.97 (90.52–96.45)
C	**95.75 (92.53–97.86)**	76.19 (52.83–91.78)	94.29 (90.89–96.70)
F adenomyosis	**92.82 (88.25–96.02)**	85.06 (75.80–91.80)	90.43 (86.38–93.60)
F bladder	48.08 (34.01–62.37)	93.04 (88.95–95.97)	84.75 (80.02–88.74)
F intestines	88.04 (82.46–92.35)	76.53 (66.89–84.50)	84.04 (79.24–88.12)
F diaphragm	66.67 (9.43–99.16)	99.64 (98.02–99.99)	99.29 (97.46–99.91)
F lung	n/a	99.65 (98.04–99.99)	n/a
F muscle	0.00 (0.00–18.53)	97.73 (95.12–99.16)	91.49 (87.60–94.47)
F appendix	0.00 (0.00–24.71)	98.51 (96.24–99.59)	93.97 (90.52–96.45)
F bone	0.00 (0.00–40.96)	99.27 (97.40–99.91)	96.81 (94.03–98.53)
F abdominal wall	83.33 (62.62–95.26)	98.83 (96.63–99.76)	97.51 (94.93–98.99)

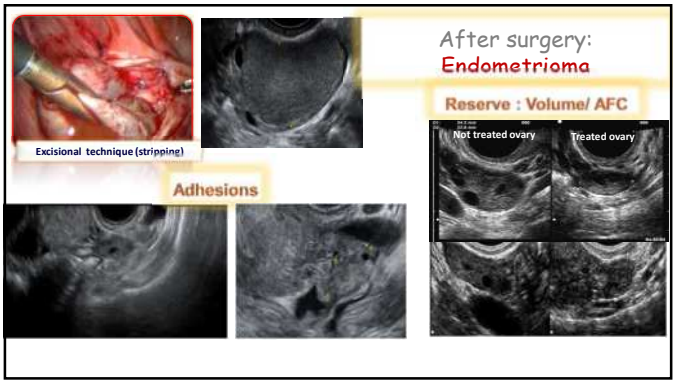
15



16



17



18

Laparoscopic removal of endometriomas: Sonographic evaluation of residual functioning ovarian tissue

Caterina Exacoustos, MD,* Erica Zupi, MD, Annalita Amadio, MD, Beata Szabolcs, MD, Bonaventura De Vivo, MD, Daniela Marconi, MD, Maria Elisabetta Romanini, MD, Domenico Arduini, MD

AJOG 2004

Ovarian recovery after laparoscopic enucleation of ovarian cysts: Insights from echographic short-term postsurgical follow-up

Massimo Candiani, MD, Maurizio Barbieri, MD, Barbara Bottani, MD, Carlo Berlusconi, MD, Michele Vignali, MD, Benedetta Agnoli, MD, Edgardo Somigliana, MD, and Mauro Busacca, MD

JMIG 2005

Ovarian surgery for bilateral endometriomas influences age at menopause

Hum Rep 2011

Maria Elisabetta Coccia[1,*], Francesca Rizzello[1], Giulia Mariani[1], Carlo Bulletti[2], Antonio Palagiano[3], and Gianfranco Scarselli[1]

Does endometriosis influence the age of menopause?

Ottolina J, Bartiromo L, Viganò P, Makieva S, Schimberni M, Candiani M

Minerva Ginecol 2018

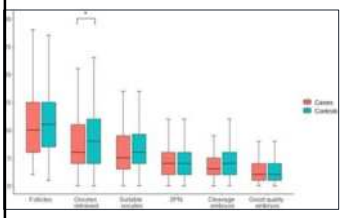
Surgery could damage normal ovarian tissue determining reduction of ovarian reserve

19

REVIEW Open Access

Endometriosis and IVF treatment outcomes: unpacking the process

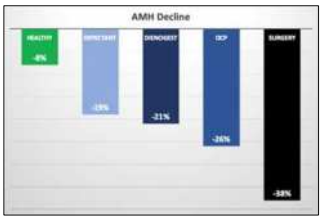
2023



- ✓ endometriosis has a negligible impact on ovarian response. A slight reduction in stimulation response can only be observed for endometriomas larger than 4 cm.
- ✓ Follicular steroidogenesis is unaffected;
- ✓ oocyte qualitys not hampered.;
- ✓ Fertilization rates are similar;
- ✓ Embryonic development is uncompromised, with no increase in aneuploidy rate;
- ✓ endometrial receptivity is either unaffected or only slightly impacted.

aside from the well-known negative effect on ovarian reserve from excisional endometrioma surgeries, endometriomas does not significantly affect IVF outcomes.

20



Impact of endometrioma management strategies on ovarian reserve over the follow-up period, a prospective longitudinal study

Kipor Aslan, Isil Kasapoglu, Batualp Kosan, Tomru Bahar Gurbuz, Ludovico Muzii, and Gurkan Uncu

Frontiers in Endocrinology 2025

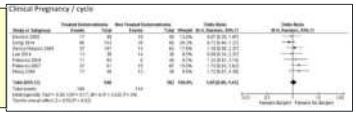
- ➢ Surgical excision of endometriomas continues to pose a risk to ovarian reserve
- ➢ Treatment with both dienogest and OCP is associated with a decrease in serum AMH levels, although the decline appears less significant with dienogest.
- ➢ Patients managed expectantly also showed a progressive decline in ovarian reserve compared to healthy controls

21

The effect of surgical management of endometrioma on the IVF/ICSI outcomes when compared with no treatment? A systematic review and meta-analysis

Nickkho-Amiry M et al. 2018

no significant differences in clinical pregnancy rate between women who underwent surgery for endometrioma and those who did not per cycle



Proposed Indications for Resection of a Suspected Endometrioma prior to assisted reproduction

1. rapid growth,
2. suspicious features noted on ultrasound,
3. painful symptoms that can be attributed to the mass,
4. potential for rupture in pregnancy,
5. inability to access follicles in normal ovarian tissue.

22

Minimally invasive surgery for ovarian endometriosis as a mean of improving fertility: Cystectomy vs. CO2 fiber laser ablation what do we know so far?

Massimo Candiani, Jessica Ottolina*, Noemi Salmeri, Sara D'Alessandro, Iacopo Tandoi, Ludovica Bartiromo, Matteo Schimberni, Stefano Ferrari and Roberta Villanucci

Frontiers in surgery 2023



Prof Candiani

CO2 fiber laser vaporization appears to be a promising method to treat endometriomas, to preserve ovarian function and to improve fertility prognosis in infertile women

23





IVF

Hormonal therapy

Expectant management

Surgery

24

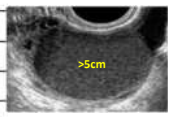
From size to shape: morphological ultrasound remodelling of large ovarian endometriomas under dienogest therapy

RBMO

Veronica Yacoub[1,2], Consuelo Russo[1,*], Aikaterini Selntigia[1], Giulia Monaco[1], Elvira Nocita[1], Sara Valeriani[1,2], Giorgia Soreca[1], Alfredo Ercoli[1], Caterina Exacoustos[1]

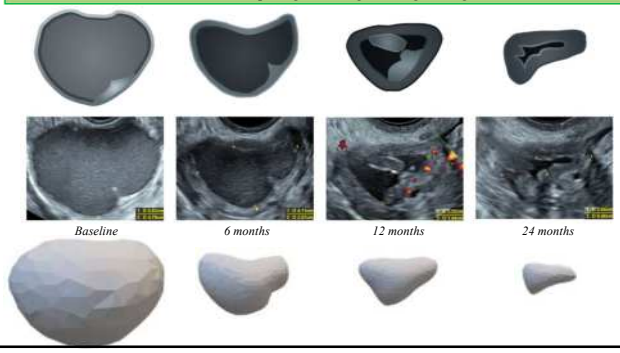
RBMO VOLUME 53 ISSUE 5 2026

Symptoms	n = 51			n = 35
Severe dysmenorrhea, VAS ≥ 7, n (%)	28 (54.9) [*,¶]	0 (0.0) [*]	0 (0.0) [¶]	0 (0.0) [#]
Dysmenorrhea, VAS (mean ± SD)	7.0 ± 3.1 [*,¶]	1.0 ± 0.5 [*]	0.2 ± 0.6 [¶]	0.0 ± 0.0 [#]
Severe dyspareunia, VAS ≥ 7, n (%)	10 (19.6)	6 (11.8)	5 (9.8)	3 (8.6)
Dyspareunia, VAS (mean ± SD)	3.2 ± 3.5	0.9 ± 2.6	0.9 ± 2.5	1.0 ± 2.7
Bowel symptoms, n (%)	14 (27.4)	8 (15.7)	6 (11.8)	2 (5.7)
CPP, n (%)	9 (17.6)	3 (5.9)	3 (5.9)	1 (2.9)
HMB, n (%)	14 (27.4) [*,¶]	0 (0.0) [*]	0 (0.0) [¶]	0 (0.0) [#]



25

Endometrioma ultrasound morphological changes during Dienogest amenorrhea



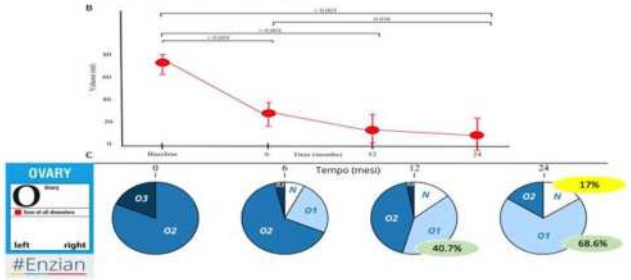
26

From size to shape: morphological ultrasound remodelling of large ovarian endometriomas under dienogest therapy

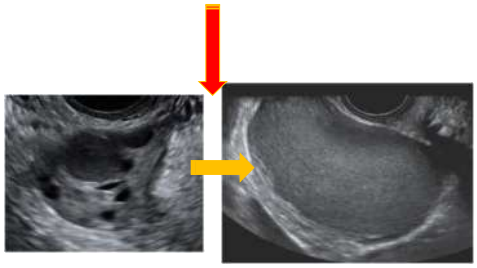
RBMO

Veronica Yacoub[1,2], Consuelo Russo[1,*], Aikaterini Selntigia[1], Giulia Monaco[1], Elvira Nocita[1], Sara Valeriani[1,2], Giorgia Soreca[1], Alfredo Ercoli[1], Caterina Exacoustos[1]

RBMO VOLUME 53 ISSUE 5 2026

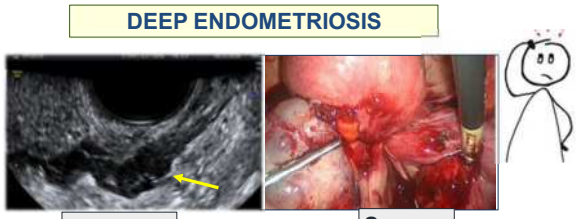


27



28

DEEP ENDOMETRIOSIS



Follow up

Expectant management

Medical Treatment

Oher Treatment

Surgery

shaving

discoid resection

Segmental bowel resection

29

Natural progression of deep pelvic endometriosis in women who opt for expectant management

Jure Knez[1,2] | Elisabeth Bean[1] | Simrit Nijjar[1] | Tina Tellum[1,3] | Prubpreet Chaggar[1] | Davor Jurkovic[1,4]

50/135 women (37%, 95% CI: 29–46) developed additional nodules or increase in nodule size,

17/135 women (13%, 95% CI: 8–19) had a regression in the number or size of the nodules.

68/135 women (50%, 95% CI: 42–59) the disease remained static during the follow-up.

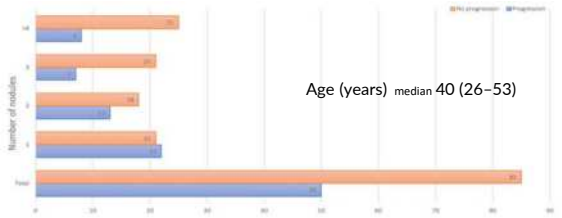
Key message
In the majority of asymptomatic or mildly symptomatic women with endometriosis, who are managed expectantly, the condition is static. In view of that, active management should be primarily governed by clinical symptoms

30

Natural progression of deep pelvic endometriosis in women who opt for expectant management

Acta Obstet Gynecol Scand. 2023

Jure Knez[1,2] | Elisabeth Bean[1] | Simrit Nijjar[1] | Tina Tellum[1,3] | Prubpreet Chaggar[1] | Davor Jurkovic[1,4]

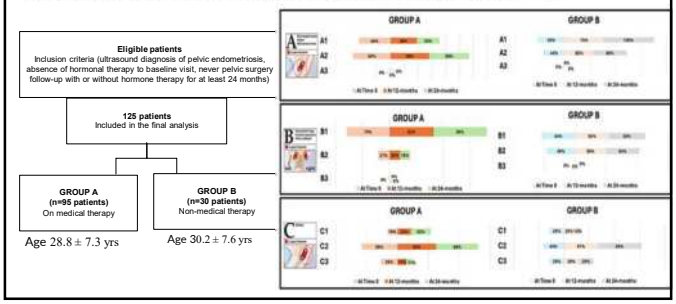


Age (years) median 40 (26–53)

31

Longitudinal ultrasound-based follow up of non-surgically treated endometriosis using #Enzian classification

Sara Valeriani, Aikaterini Selntigia, Consuelo Russo, Myriam Adele Traulo, Elvira Nocita, Federica Iacobini, Daniele Farsetti, Giorgia Soreca, Caterina Exacoustos



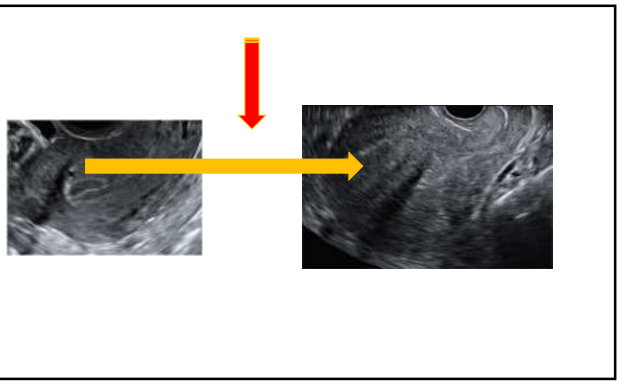
32

Longitudinal ultrasound-based follow up of non-surgically treated endometriosis using #Enzian classification

Sara Valeriani, Aikaterini Selntigia, Consuelo Russo, Myriam Adele Traulo, Elvira Nocita, Federica Iacobini, Daniele Farsetti, Giorgia Soreca, Caterina Exacoustos

#Enzian Compartments	GROUP A (95) Baseline n (%)	GROUP A (95) 24 months n (%)	p-value	GROUP B (30) Baseline n (%)	GROUP B (30) 24 months n (%)	p-value
A (vagina, rectovaginal space)	Total n = 24 (25.3 %)	Total n = 22 (23.2 %)	0.709	Total n = 9 (30.0 %)	Total n = 11 (36.7 %)	0.097
A1	11 (11.6 %)	8 (8.4 %)		3 (10.7 %)	9 (30.0 %)	
A2	13 (13.7 %)	14 (14.7 %)		6 (13.3 %)	6 (20.0 %)	
A3	0 (0.0 %)	0 (0.0 %)		0 (0.0 %)	0 (0.0 %)	
B (USL, cardinal ligaments, pelvic sidewall)	Total n = 76 (80 %)	Total n = 89 (93.7 %)	0.329	Total n = 24 (80 %)	Total n = 27 (90 %)	0.695
B1	60 (63.2 %)	75 (78.9 %)		13 (43.3 %)	14 (46.7 %)	
B2	16 (16.8 %)	14 (14.7 %)		11 (36.7 %)	13 (43.3 %)	
B3	0 (0.0 %)	0 (0.0 %)		0 (0.0 %)	0 (0.0 %)	
C (rectum)	Total n = 19 (20.0 %)	Total n = 21 (22.1 %)	0.675	Total n = 7 (23.3 %)	Total n = 9 (30.0 %)	0.163
C1	3 (3.2 %)	6 (6.3 %)		2 (6.7 %)	1 (3.3 %)	
C2	11 (11.6 %)	13 (13.7 %)		3 (10.0 %)	6 (20.0 %)	
C3	5 (5.3 %)	2 (2.1 %)		2 (6.7 %)	2 (6.7 %)	
O (ovary)	Total n = 83 (87.4 %)	Total n = 83 (66.3 %)	0.001	Total n = 29 (96.7 %)	Total n = 29 (96.7 %)	0.603
O1	40 (42.1 %)	57 (60.0 %)		19 (63.3 %)	15 (50.0 %)	
O2	43 (45.3 %)	6 (6.3 %)		10 (33.3 %)	14 (46.7 %)	
O3	1 (1.1 %)	0 (0.0 %)		0 (0.0 %)	0 (0.0 %)	
T (tubo-ovarian condition)	Total n = 83 (87.4 %)	Total n = 80 (84.3 %)	0.752	Total n = 29 (96.7 %)	Total n = 30 (100.0 %)	0.305
T1	7 (7.4 %)	4 (4.2 %)		0 (0.0 %)	1 (3.3 %)	
T2	25 (26.3 %)	24 (25.3 %)		17 (56.7 %)	14 (46.7 %)	
T3	51 (53.7 %)	52 (54.7 %)		12 (40.0 %)	15 (50.0 %)	
FA (adenomyosis)	Total n = 46 (48.4 %)	Total n = 49 (51.6 %)	0.317	Total n = 16 (53.3 %)	Total n = 22 (73.3 %)	0.014

33



34

Ultrasound morphological changes of pelvic endometriosis and adenomyosis and symptoms variations before and during treatment with Relugolix Combination Therapy (CT)

Retrospective observational study in the Ultrasound Center of Policlinico Tor Vergata, Rome

REGULOVIX CT + US EVALUATION

T0: baseline 94pts

T1: 3-6 months follow-up 50 pts

T2: 7-12 months follow-up 18pts

US findings and characteristics	Total patients at baseline (n=50) n (%)	Total patients at T1 follow up (n=50) n (%)	Total patients at T2 follow up (n=17) n (%)	P value T0-T1	P value T0-T2
Enzian compartments					
FA (adenomyosis)	41 (82.0)	41 (82.0)	15 (88.2)	1.0	0.7
Characteristics of adenomyosis					
Diffuse outer myometrium	18 (43.9)	18 (43.9)	9 (60.0)	1.0	0.3
Diffuse inner myometrium	1 (2.4)	1 (2.4)	0 (0.0)	1.0	1.0
Diffuse inner and outer myometrium	20 (48.9)	20 (48.9)	6 (40.0)	1.0	0.7
Focal outer myometrium	1 (2.4)	1 (2.4)	0 (0.0)	1.0	1.0
Focal inner myometrium	1 (2.4)	1 (2.4)	0 (0.0)	1.0	1.0

35

Surgical Complications

PREVENTION ?



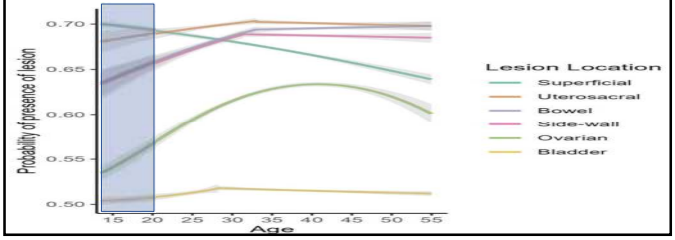
EARLY TREATMENT

EARLY DIAGNOSIS

36

Endometriosis lesion distribution by age at presentation: an international multicentre database study

14 670 patients surgery for endometriosis 2009 - 2021 in 104 centers of 7 different nation

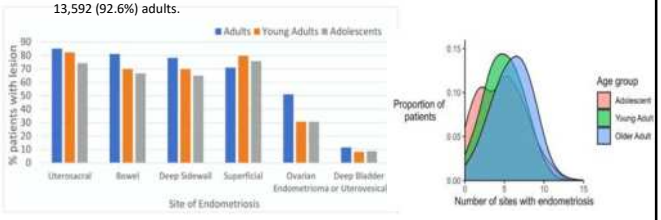


37

Characteristics of Adolescent and Young Adult Patients Undergoing Surgery for Deep Endometriosis: A Multicenter Database Study

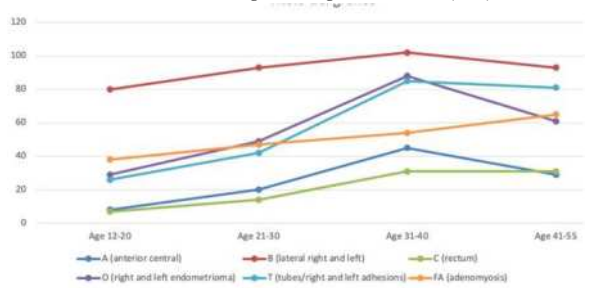
J Pediatr Adolesc Gynecol 2026

14,670 endometriosis at surgery
186 (1.3%) adolescents (aged 10- 19 years), 892 (6.1%) young adults (aged 20- 24 years)
13,592 (92.6%) adults.



38

Age-related differences in endometriosis compartments classified by #Enzian classification through transvaginal ultrasound (TVS)



Russo C , Exacoustos C under review

39

Adolescence and endometriosis: symptoms, ultrasound signs, and early diagnosis

Fertil Steril 2020

Retrospective observational study including 270 (12-20yrs) adolescents
January 2014 to June 2019

- **13.3% (36) adolescents with ultrasound sign of endometriosis**
  - **22 (61.1%) Endometrioma**
  - **10 (27.7%) DIE**
  - **16 (44.4%) Adenomyosis**

Ultrasound findings	Total population (n = 270)
Endometriosis	36 (13.3)
PCO	36 (13.3)
Congenital uterine anomalies	23 (8.5)
Uterine agenesia	2 (0.7)
Septate uterus	9 (3.3)
Subseptate/arcuate uterus	11 (4.1)
Bicornuate uterus	1 (0.4)
Adnexal lesions	41 (15.2)
Uterine fibroids	2 (0.7)
Normal US appearance	132 (48.9)
Endometriosis	
Negative posterior sliding sign	18 (6.7)
Adnexal adhesions	18 (6.7)
DIE (total)	10 (3.7)
USL	7 (2.6)
Rectosigmoid	2 (0.7)
Bladder	1 (0.4)
Adenomyosis	16 (5.2)
Endometrioma	22 (8.1)

40

Early noninvasive diagnosis of endometriosis: dysmenorrhea and specific ultrasound findings are important indicators in young women

Fertility and Sterility® 2023



Retrospective observational study including
371 women ≤25 yrs
with severe DYSMENORHEA ≥7

12-16yrs: 39(10.5%), 16-20 yrs:121 (32.6%), 21-25yrs: 211 (56.9%)
2D, 3D and power-doppler TVS was performed in all young patients not on hormonal treatment

- **131 (35.6%) had at least one ultrasound sign of endometriosis/adenomyosis**
  - **Adenomyosis 51%**
  - **USL 48%**
  - **Endometrioma 41%**
- **Isolated findings in 21%**

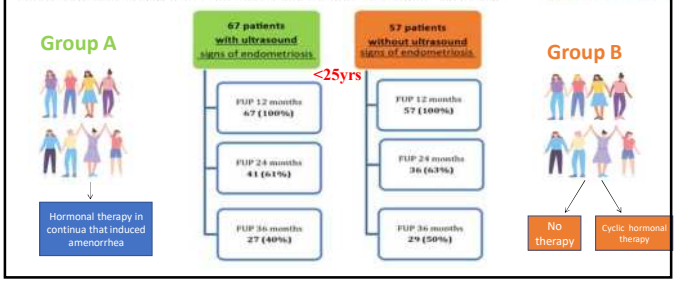
41

Original Article

Ultrasound Follow-Up in young women with severe dysmenorrhea predicts early onset of endometriosis

Journal of Gynecology Obstetrics and Human Reproduction 54 (2025)





42

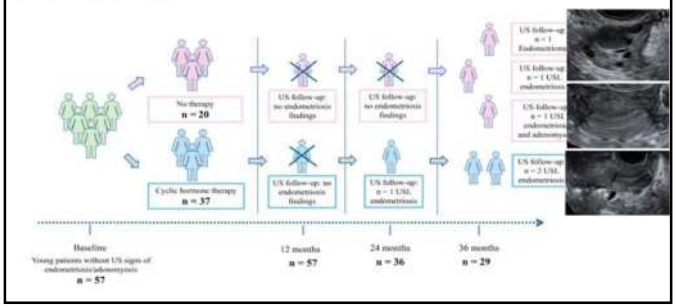
Ultrasound Follow-Up in young women with severe dysmenorrhea predicts early onset of endometriosis

67 YOUNG PATIENTS <25yrs
WITH US ENDOMETRIOSIS FINDINGS
underwent during FOLLOW UP
HORMONAL TREATMENT THAT INDUCED AMENORRHEA

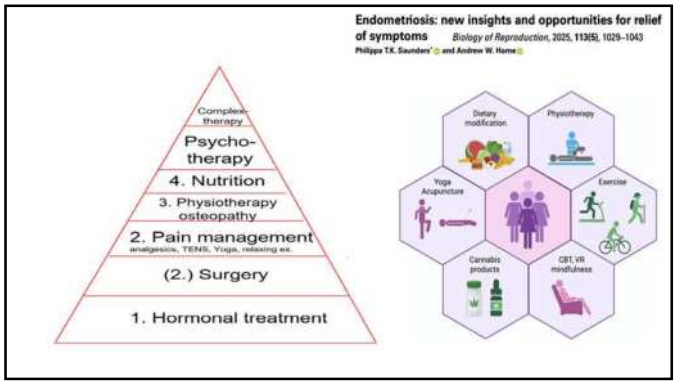
ULTRASOUND ENDOMETRIOTIC FINDINGS IN YOUNG PATIENTS BEFORE AND DURING HORMONAL TREATMENT	AT STARTING FOLLOW UP (n=67)		12 MONTHS (n=67)		24 MONTHS (n=41)		36 MONTHS (n=27)	
	N %	max diameter mean ±DS	N %	max diameter mean ±DS	N %	max diameter mean ±DS	N %	max diameter mean ±DS
POSTERIOR DIE								
Sigmoid-rectal	8	14.4±6.2	8	12.8±4.6	7	9.7±3.6	3	13.5±8.9
Torus and USL bilateral	37	8.2±3.9	35	6.5±2.3 *	24	6.4±2.2**	14	6.1±2.1
Not more seen at US			2/37 5.4%		2/26 7.7%		5/19 26.3%	
ENDOMETRIOMA	32	32.9±15.5	31	22.9±14.6*	21	19.7±12.2**	9	17.4±11.9***
Not more seen at US			1/32 3.1%		2/23 8.7%		6/15 40%*	
ADENOMYOSIS	31		29		13		7	
Not more seen at US			2/31 6.4%		1/14 7.1%		2/9 22.2%	

43

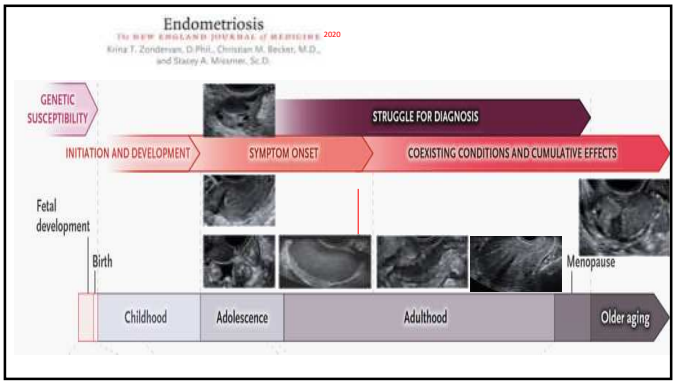
57 YOUNG PATIENTS
WITHOUT ENDOMETRIOSIS FINDINGS at TVS
underwent during FOLLOW UP any treatment or cyclic EP



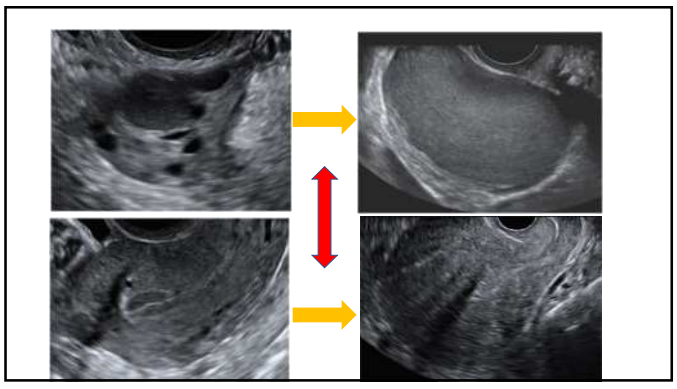
44



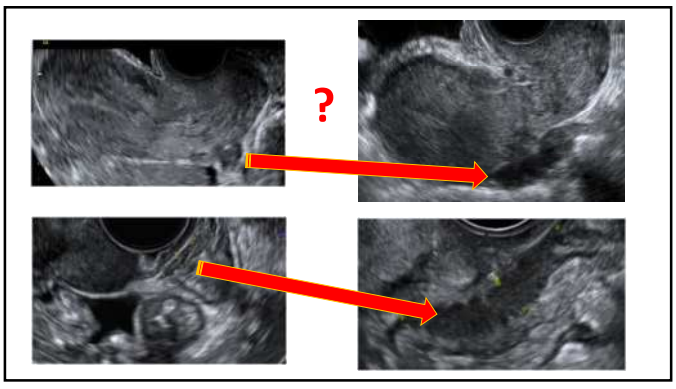
45



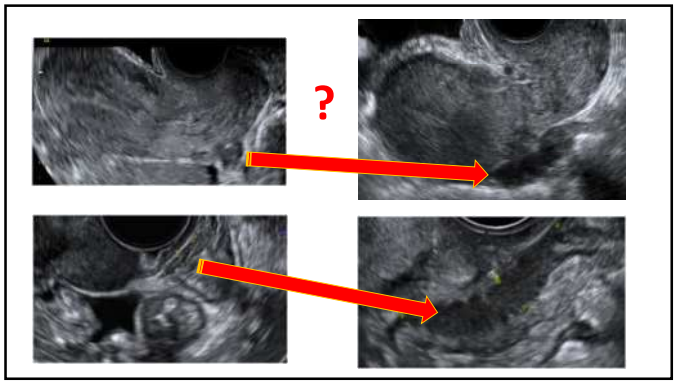
46



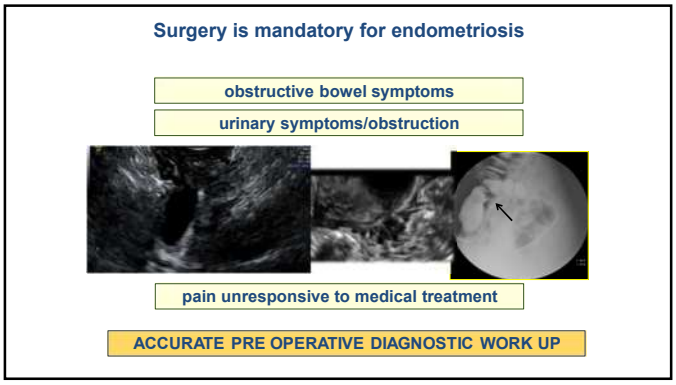
47



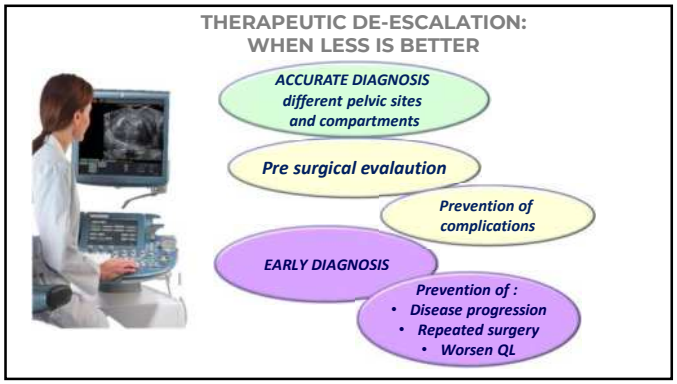
48


?

49


Surgery is mandatory for endometriosis
obstructive bowel symptoms
urinary symptoms/obstruction
pain unresponsive to medical treatment
ACCURATE PRE OPERATIVE DIAGNOSTIC WORK UP

50


THERAPEUTIC DE-ESCALATION:
WHEN LESS IS BETTER
ACCURATE DIAGNOSIS
different pelvic sites
and compartments
Pre surgical evalaution
Prevention of
complications
EARLY DIAGNOSIS
Prevention of :
• Disease progression
• Repeated surgery
• Worsen QL

51

From Expert Surgeons to Expert Systems:

Standardizing Excellence in Minimally Invasive Gynecologic Surgery

Luis F. Garcia, MD · TecSalud · Monterrey, Mexico

NOVEMBER 13-16, 2026 · BOSTON · #AAGL26

1

Disclosure

- Speaker for Johnson & Johnson Institute
- CEO & founder ProScope Institute

2

Objectives

- Describe why individual expertise alone cannot ensure reliable access to high-quality MIGS care
- Identify the core components of a measurable, competency-based surgical training system
- Explain how accreditation can advance accountability and equity without becoming punitive.

3

Would you trust the surgeon—or the system?

- EXCELLENCE THAT DEPENDS ON ONE INDIVIDUAL IS VALUABLE—BUT FRAGILE.



4

The problem is not talent—it is variability

- TRAINING GAP:Different curricula, volume and operative exposure
- QUALITY GAP: Competency and outcomes are not measured consistently
- ACCESS GAP: Geography, resources and mentorship determine opportunity

- Garcia Rodriguez LF. National Framework for Standardization and Accreditation of MIGS Fellowship Programs in Mexico. Harvard Medical School, SLP. Final Capstone Project, 2026
- Guntupalli SR, et al. Obstet Gynecol. 2015;126:559-568
- McGinnis OC, et al. J Surg Res. 2025;313:198-209

5

An expert system makes excellence reproducible

- STANDARDIZED CURRICULUM
- DEFINED COMPETENCIES
- QUALIFIED FACULTY + MENTORSHIP
- OBJECTIVE ASSESSMENT
- OUTCOMES + CONTINUOUS IMPROVEMENT



- Standardize competencies and outcomes—not professional judgment.

Fernandes CFK, et al. Rev Bras Ginecol Obstet. 2016
Shehata D, et al. Surgery. 2025;181

6

Accountability: a mirror—not a weapon

- DEFINE → MEASURE → REVIEW → SUPPORT → IMPROVE
- Evaluation should reveal strengths, detect gaps and create a pathway for improvement.
- Fear produces defensiveness - Developmental accountability produces learning.

7

Equity requires a common standard—not identical resources

- DIFFERENT STARTING POINTS
- Technology · Infrastructure · Mentorship · Surgical volume
- ONE COMMON DESTINATION
- Competency · Safety · Appropriate selection · Measurable outcomes

McGinnis OC, et al. J Surg Res. 2025;313:198-209

8

Mexico: start small, learn quickly, scale responsibly

- PHASE 1 · PILOT | 2–3 centers | Validate standards and build trust
- PHASE 2 · EXPANSION | 5–10 centers | Refine evaluation and develop faculty
- PHASE 3 · NATIONAL SCALE | Accreditation network | Shared outcomes

Garcia Rodriguez LF. National Framework for Standardization and Accreditation of MIGS Fellowship Programs in Mexico. Harvard Medical School, SLP. Final Capstone Project, 2026

9

The future cannot depend on finding the right hero



- DO NOT REPLACE THE EXPERT
- BUILD A SYSTEM THAT MULTIPLIES EXPERTISE
- The ultimate measure is how many patients receive excellent care—regardless of where they live.

10

Thank You…



Hospital Zambrano Hellion – TecSalud
Monterrey, México

LUISFGARCIAR

Luis F García MD
TecSalud Professor
FEMEG President 2025-27

11

References

- Fernandes CFK, et al. Assessment of laparoscopic skills of Gynecology and Obstetrics residents after a training program. Einstein (São Paulo). 2016;14(4):468–472.
- Guntupalli SR, et al. Preparedness of Obstetrics and Gynecology Residents for Fellowship Training. Obstet Gynecol. 2015;126(3):559–568.
- McGinnis OC, et al. Global Utilization of Minimally Invasive Surgery: Practice and Challenges. J Surg Res. 2025;313:198–209.
- Shehata D, et al. The evolution of surgical skills simulation education: Advanced laparoscopic skills. Surgery. 2025;181:109248.
- Garcia Rodriguez LF. National Framework for Standardization and Accreditation of MIGS Fellowship Programs in Mexico. Harvard SLP capstone, 2026.

12

From Barriers to Better Care

A learning health system for patients living with obesity and endometrial hyperplasia or cancer

Access • Robotics • Education • Research • Communication

Sari Kives, MD | CanSAGE President 2026
FRCSC St Michaels Hospital



1

Learning objectives

1. Describe barriers to equitable gynecologic and oncologic care experienced by patients living with obesity.
2. Explain how a specialized clinic, robotic surgery and structured patient education can improve access and experience.
3. Recognize how patient-derived research can inform respectful, patient-centred communication about obesity and weight.

2

Why this population?

Endometrial cancer, obesity and surgical complexity intersect.

- Obesity is a major risk factor for endometrial cancer.
- Early disease is often curable with hysterectomy, ideally by a minimally invasive approach.
- Higher BMI can add anesthetic, technical and equipment challenges—but should not become a barrier to definitive treatment.

The clinical question became an access question.



3

Robotics in Canada: a fundamentally different access environment

Canada adopted robotic-assisted surgery far more slowly than the United States — largely because capital and operating costs sit inside constrained hospita

CANADA	UNITED STATES
39	**6,364**
Canadian sites performing da Vinci RAS (February 2025)	da Vinci systems installed (December 31, 2025)
Only 7 hospitals had more than one system.	Different measures (Canadian sites vs U.S. systems), but the scale gap is unmistakable.

Canadian adoption has historically depended heavily on philanthropy/foundation funding, with hospital budgets absorbing maintenance and disposable costs.

Sources: Wong et al., Healthcare Management Forum 2026; Intuitive Surgical 2025 Annual Report; Ontario Health: HTA.

4

Why Canadian programs had to be selective

The technology was expensive in both countries; the funding model made the consequences different.

CAPITAL	SERVICE	DISPOSABLES
US$0.5–2.5M	US$80–190K/yr	~C$1,507/case
System price range reported by Intuitive (2021; model/configuration dependent)	Annual service-fee range	Ontario estimate for robotic hysterectomy disposables (2022 CAD)

CANADIAN REALITY

Capital often philanthropy-funded • maintenance + disposables compete within global hospital budgets • limited robot time must be allocated where the incremental clinical value is greatest.

This helps explain our early gynecologic strategy: prioritize patients in whom conventional laparoscopy was most difficult or least available — particularly severe obesity with atypical hyperplasia or low-grade endometrial cancer.

Important: there is no simple evidence that the robot itself costs more in Canada than in the U.S.; the key difference is how those costs are financed and absorbed.

5

Research identified the barriers first

RESEARCH

15 patients • median BMI 50 kg/m² • referral distances 10–1500 km


grade endometrial cancer and morbid obesity: a qualitative study

Knowledge	Gaps in awareness of endometrial cancer, symptoms and risk factors.
Communication	Weight stigma and poor provider communication affected care experiences.
System	Administrative, geographic, financial, facility and equipment barriers.
Referral	Every participant saw 2–4 specialists before being consented for surgery.

6

What patients told us changed the design

PATIENT VOICE

Qualitative research translated directly into service redesign.

Multiple referrals	→	Centralized referral
Travel burden	→	Virtual first consultation
Facilities not accommodating	→	Obesity-informed environment & equipment
Cancelled/abandoned surgery	→	Experienced team + standardized OR pathway

Research was not downstream of the clinic—it helped define the clinic.

€ MASCO | Patient barriers verified (Cusimano 2016); redesign links are program interpretation.

7

TEAM Clinic: the integrated model

Treatment of Endometrial Atypia and Malignancy

ACCESS	OPTIMIZE	OPERATE	LEARN
Centralized triage Virtual consultation	Multidisciplinary assessment Fewer fragmented visits	Robotic expertise Standardized pathway	Audit, qualitative research and continuous QI

Founded 2018 • Monthly program since 2020 • >200 patients treated from across Ontario

€ MASCO | Monthly since 2020and >200patients verified (U of T); founded 2018retained as program data.

8

Robotics as an access strategy

The robot is not the story—the ability to offer minimally invasive surgery is.



Why robotics?

- Provides a minimally invasive option for technically complex patients.
- Allows a general gynecology robotic team to treat selected hyperplasia and low-grade cancer.
- Creates a destination pathway for patients previously declined or redirected elsewhere.

Clinical innovation became measurable research.

€ MASCO | Robotic-safety/access rationale supported by McLeod 2021; pathway/language in program framing.

9

Research: 10 years of robotic outcomes

RESEARCH

160 robotic hysterectomies • 5 general gynecologists • 2008–2018

43	3%	2%	8%	3%
Mean BMI (range 21–71)	Intraoperative complications	Conversion to laparotomy	Postoperative complications	Readmission

No difference in perioperative complications, readmission or recurrence across BMI strata.

Higher BMI increased operative time and blood loss, but not the major clinical outcomes that determine whether minimally invasive surgery is feasible.

McLeod U, Nensi A, Robertson D, Kives S. J Obstet Gynaecol Can. 2021;43:157-163. PMID:33259942.
✓ VERIFIED | McLeod U et al. | Obstet Gynecol Can. 2021;43:157-163. PMID:33259942.

10

The next bottleneck: the operating room

QI + DATA

Complex surgery needs a reliable system, not heroic workarounds.



- Map every step from room opening to PACU transfer.
- Identify idle time, parallel tasks and equipment dependencies.
- Create an "ideal-state" pathway shared by nursing, anesthesia and surgery.
- Use PDSA cycles to refine and sustain the process.

Standardization protects access.

✓ VERIFIED | Nensi A et al. JOGC 2020;42(5):646.JMIG 2019;26(7):5156-5166.

11

Did process redesign work?

OUTCOMES

Prospective measurement after implementation of the OR pathway.

241 → 213 min	28 min	11%	70%
Mean robotic hysterectomy case time	Time saved per case	Reduction in mean case time	Reduction in second-case cancellations

These gains were sustained.

Efficiency is not simply an OR metric: fewer cancellations and shorter cases translate into greater capacity and a more predictable patient journey.

Source: Nensi A, Simpson A, Kives S, et al. UtilizingLean Methodology to Optimize Operating Room Efficiency. JOGC 2020;42(5):684.

✓ VERIFIED | Nensi A et al.: case time −28 min (11%); second-case cancellations −70%.

12

Access improved beyond the operating room

SYSTEM IMPACT

Centralization + provider outreach + virtual care shortened the front end of the journey.

4.5 mo
Average diagnosis → first clinic visit before 2020

→

2.25 mo
Average diagnosis → first TEAM Clinic visit since 2020

50% reduction

- One referral instead of repeated referrals
- Virtual access for rural/remote patients
- Coordinated multidisciplinary assessment
- Appropriate chairs, exam rooms and OR equipment

Source: University of Toronto Dept. of Obstetrics & Gynaecology — TEAM Clinic Quality Award report.

✓ VERIFIED | University of Toronto TEAM Clinic report: 4.5 → 2.25 months; >300 patients.

13

TEAM Clinic: the St. Michael's patient-facing program

The hospital webpage makes the model visible: specialized robotic care, multidisciplinary support, education and research.



What patients can find

- What is endometrial cancer / hyperplasia?
- What to expect at the clinic visit
- Treatment options
- How to prepare for surgery
- What happens after surgery
- Patient handouts and other resources
- Links to the TVASurg robotic hysterectomy portal

Image: St. Michael's robotic gynecology team • Source: Unity Health Toronto TEAM Clinic webpage.

14

Patient education: choose what you need, when you need it

The TEAM Clinic page links patients to targeted videos and the TVASurg robotic hysterectomy learning portal.



TVASurg patient portal

Two videos at key moments

1 PRE-OPERATIVEAPPOINTMENT
What to expect in your pre-operative appointment

2 SURGERY + RECOVERY
What to expect on the day of robotic surgery and in post-operative recovery

Patients can also select portal sections such as Anatomy • Procedure • Indications • Risks • How to Prepare • What to Expect.

Images from your uploaded TVASurg example and St. Michael's/TEAM materials.

15

The research cycle continues

RESEARCH

Each phase of the program generates the next research question.

1	→	2	→	3	→	4	→	5
EXPERIENCE		OUTCOMES		PROCESS		EDUCATION		COMMUNICATION
What barriers do patients encounter?		Can robotics provide safe MIS?		Can we make care more efficient?		How do we better prepare patients?		How should clinicians discuss weight?

A clinical program becomes a learning health system when data and patient experience continuously reshape care.

• PROGRAM DATA / INTERPRETATION | Learning-health-system synthesis/sequence — program framing

16

Words matter: the next research frontier

CURRENT RESEARCH

Patients told us stigma and communication were barriers. Now we are studying the clinician side.

ASK
Seek permission before discussing weight.

LISTEN
Understand priorities and prior experiences of stigma.

CONTEXTUALIZE
Connect weight to the specific clinical decision—without blame.

PARTNER
Use person-centred language and shared decision-making.

Goal: move from identifying weight stigma to defining communication practices patients experience as respectful and useful.

• PROGRAM DATA / INTERPRETATION | Current research direction retained from your information; not independently verified as published results.

17

What this program taught us



ACCESS	Design the pathway around the barriers patients actually experience.
TECHNOLOGY	Use robotics as an enabler of equitable minimally invasive care.
RESEARCH	Measure outcomes, efficiency, experience and communication—not just surgical success.
PATIENT VOICE	Let qualitative evidence change the system.
SUSTAINABILITY	Build improvement into routine care through data and iteration.

Innovation is strongest when technology, education, research and respectful communication evolve together.

• PROGRAM DATA / INTERPRETATION | Conclusion/synthesis — interpretive take-home messages, not quantitative claims.

18

CULTURAL AND LINGUISTIC COMPETENCY & IMPLICIT BIAS

The California Medical Association (CMA) outlines standards for Cultural Linguistic Competency and Implicit Bias in CME. The goal of the standards is to support the role of accredited CME in advancing diversity, health equity, and inclusion in healthcare. These standards are relevant to ACCME-accredited, CMA-accredited, and jointly accredited providers located in California. AAGL is ACCME-accredited and headquartered in California.

CMA developed the standards in response to California legislation (Business and Professions (B&P) Code Section 2190.1), which directs CMA to draft a set of standards for the inclusion of cultural and linguistic competency (CLC) and implicit bias (IB) in accredited CME.

The standards are intended to support CME providers in meeting the expectations of the legislation. CME provider organizations physically located in California and accredited by CMA CME or ACCME, as well as jointly accredited providers whose target audience includes physicians, are expected to meet these expectations which began on January 1, 2022. AAGL has been proactively adopting processes that meet and often exceed the required expectations of the legislation.

CMA CME offers a variety of resources and tools to help providers meet the standards and successfully incorporate CLC & IB into their CME activities, including FAQ, definitions, a planning worksheet, and best practices. These resources are available on the CLC and IB standards page on the CMA website.

Important Definitions:

Cultural and Linguistic Competency (CLC) – The ability and readiness of health care providers and organizations to humbly and respectfully demonstrate, effectively communicate, and tailor delivery of care to patients with diverse values, beliefs, identities and behaviors, in order to meet social, cultural and linguistic needs as they relate to patient health.

Implicit Bias (IB) – The attitudes, stereotypes and feelings, either positive or negative, that affect our understanding, actions and decisions without conscious knowledge or control. Implicit bias is a universal phenomenon. When negative, implicit bias often contributes to unequal treatment and disparities in diagnosis, treatment decisions, levels of care and health care outcomes of people based on race, ethnicity, gender identity, sexual orientation, age, disability and other characteristics.

Diversity – Having many different forms, types or ideas; showing variety. Demographic diversity can mean a group composed of people of different genders, races/ethnicities, cultures, religions, physical abilities, sexual orientations or preferences, ages, etc.

Direct links to AB1195 (CLC), AB241 (IB), and the B&P Code 2190.1:

Bill Text – AB-1195 Continuing education: cultural and linguistic competency.
Bill Text – AB-241 Implicit bias: continuing education: requirements.
Business and Professions (B&P) Code Section 2190.1

CLC & IB Online Resources:

Diversity-Wheel-as-used-at-Johns-Hopkins-University-12.png (850×839) (researchgate.net)
Implicit Bias, Microaggressions, and Stereotypes Resources | NEA
Act, Communicating, Implicit Bias (racialequitytools.org)
https://www.contemporaryobgyn.net/view/overcoming-racism-and-unconscious-bias-in-ob-gyn
https://pubmed.ncbi.nlm.nih.gov/34016820/
https://hr.ucdavis.edu/departments/learning/certificate/implicit-bias
https://pmc.ncbi.nlm.nih.gov/articles/PMC7011228/