5/st GLOBAL CONGRESS ON MIGS

December 1-4, 2022 | Gaylord Rockies Resort and Convention Center | Aurora, Colorado

SYLLABUS

ANAT-617: Advanced Anatomy – Accessing the Pelvic Sidewall

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Linda J. Bell, Admin Support, AAGL*

Linda D. Bradley, MD, Medical Director, AAGL*

Erin T. Carey, MD, MSCR Honorarium: Med IQ Research Funding: Eximis Mark W. Dassel, MD*

Linda Michels, Executive Director, AAGL*

Vadim Morozov, MD Speaker: AbbVie

Consultant: Medtronic, Lumenis

Erinn M. Myers, MD

Speakers Bureau: Intuitive Surgical

Amy J. Park, MD Speaker: Allergan

Nancy Williams, COO, CME Consultants*

Harold Y. Wu, MD*

Sven Becker, MD, PhD - Speaker's Fees: Olympus,

Storz, Medtronic, Hologic, Gedeon-

Richter, Roche, MSD, Bayer, GSK, Pharmamar, GE,

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Intuitive, Merck, Lily, Pierre-Fabre, Jenapharm, Zeiss Giovanni Scambia, MD – Speakers Bureau: Intuitive Surgical; Baxter; Olympus; GlaxoSmithKline;

Consultant: Medtronic; AstraZeneca; Johnson &

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SCIENTIFIC PROGRAM COMMITTEE

Andrew I. Sokol, MD - Medical Legal Defense: Johnson & Johnson Angela Chaudhari, MD - Consultant: Johnson & **Johnson**

Cara R. King, DO*

Mario Malzoni, MD - Consultant: KARL STORZ Jessica Opoku-Anane, MD, MS – Consultant: Boston

Scientific; Myovant Sciences; AbbVie Shailesh P. Puntambekar, MD, PHD*

Frank F. Tu, MD, MPH*

Jonathon M. Solnik, MD – Consultant: Olympus; Medtronic; Stockholder: Field Trip Health, Inc.; Felix

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Linda D. Bradley, MD, Medical Director* Linda Michels, Executive Director, AAGL*

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Jessica Opoku-Anane, MD, MD – Consultant: Boston

Scientific; Myovant; AbbVie

Giovanni Scambia, MD - Speakers Bureau: Intuitive Surgical; Baxter; Olympus; GlaxoSmithKline;

Consultant: Medtronic; AstraZeneca; Johnson &

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ANAT-617: Advanced Anatomy – Accessing the Pelvic Sidewall

Co-Chairs: Sven Becker, MD, PhD, Giovanni Scambia, MD

Faculty: Jon Ivar Einarsson, MD, PhD, MPH and Jessica Opoku-Anane, MD, MS

Course Description

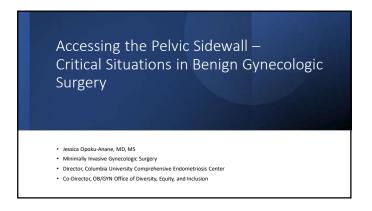
Outside of an oncological oriented training course, the systematic access to the pelvic sidewall is rarely taught, even though it is often needed. This course will present basic tips and tricks related to everyday surgical challenges and will also touch on possible complications. Addressing a non-oncologic audience, different aspects of dissecting and visualizing the different anatomical structures, spaces, and compartments of the pelvic sidewall will be discussed. While the session is lecture based, the objective is to have the audience involved in a highly interactive format allowing for the exchange of relevant information for the practicing physician.

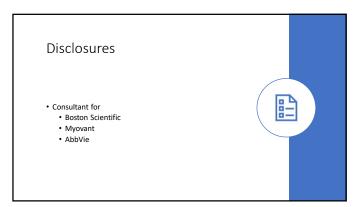
Learning Objectives

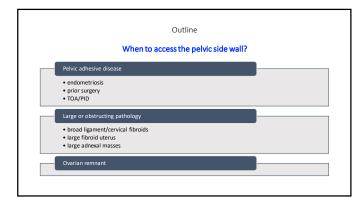
At the conclusion of this course, the participants will be able to: 1) Utilize key steps in how to open the pelvic sidewall; 2) Employ the essential tricks on how to find the ureter; 3) Locate the origin of the uterine artery; 4) Navigate the pelvic sidewall appropriately; and 5) Avoid pelvic sidewall complications.

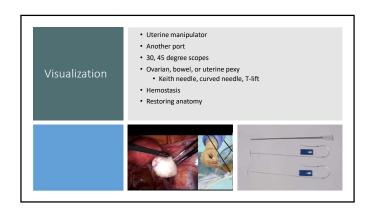
Course Outline

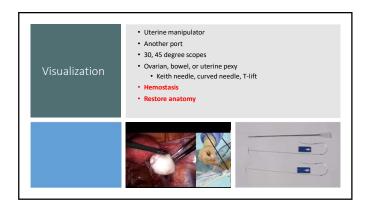
2:30 pm	Welcome, Introduction and Course Overview	G. Scambia/S. Becker
2:35 pm	When Do You Need the Ability to Access the Pelvic Sidewall? Critical Situation in Benign Gynecologic Surgery	J. Opoku-Anane
3:00 pm	The Pelvic Sidewall and the Endometriosis-Surgeon	J.I. Einarsson
3:25 pm	The Pelvic Sidewall the Oncologic Surgeon	G. Scambia
3:50 pm	Things NEVER to Do, Things ALWAYS to Do in the Pelvic Sidewall	S. Becker
4:15 pm	Into Remote Corners and Extreme Situations – Panel Discussion	All Faculty
4:40 pm	Questions & Answers	All Faculty
5:00 pm	Adjourn	



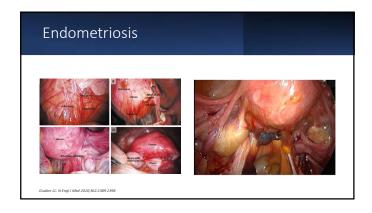


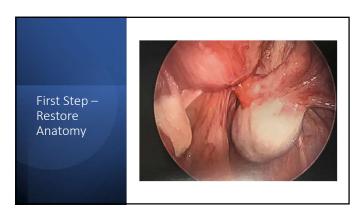


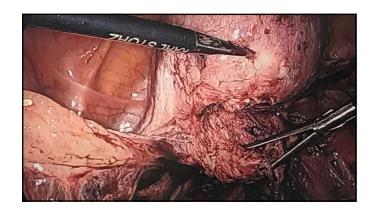


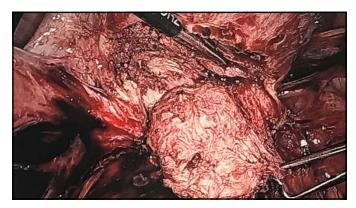


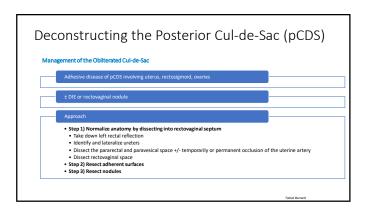














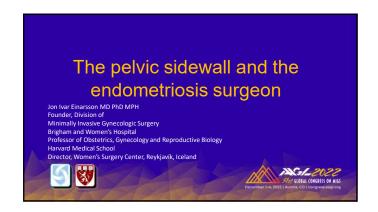






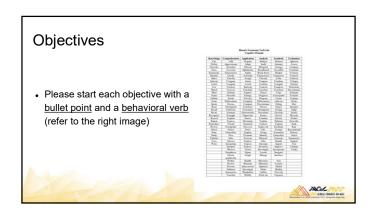


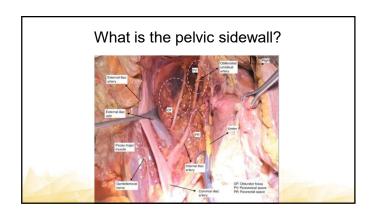


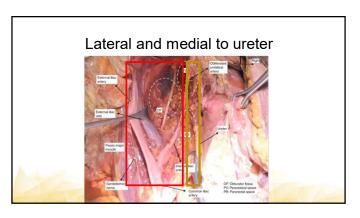


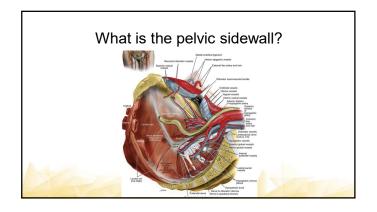
Disclosure I am a consultant for Arthrex, Hologic and Olympus I have ownership in Freyja Healthcare, a startup company developing several medical devices

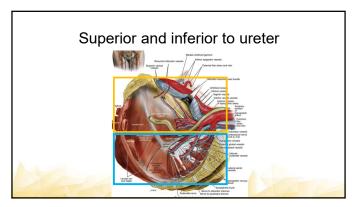
Objectives To explain the various anatomic spaces of the pelvic sidewall as they relate to endometriosis surgery To discuss my approach to the surgical management of endometriosis of the pelvic sidewall





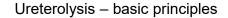






Most familiar space – medial to the ureter

- Includes ureter, uterine artery in part, hypogastric nerve and uterosacral ligaments
- This is the area of the pelvic sidewall that is most commonly affected by endometriosis
- Intimate knowledge of the anatomy of the ureter and training in safe ureter dissection is paramount to endometriosis surgery





Ovarian cysts – the compressed ureter



The ureter and endometriosis

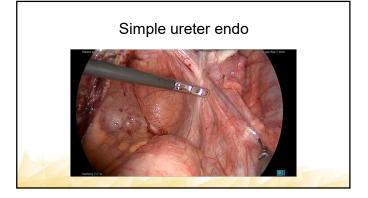
- The bladder or ureter are only involved in 1% of women with endometriosis
- A ratio of 40:5:1 has been described for proportion of bladder to ureteral to renal involvement
- Specific symptoms are lacking
- Often an incidental finding during surgery for pelvic pain
- Most significant outcome can be silent loss of renal function due to progressive obstruction and hydronephrosis
- Loss of renal function occurs in up to 50% of cases

End-to-end vs. reimplantation

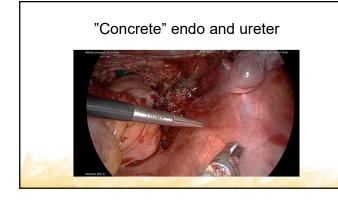
- End-to-end anastomosis
 For lesions less than 3-4cm
 Simpler
 Can be done by a gynecologist
- Ureteroneocystostomy
 For lesions larger than 3-4 cm
 For lesions located in proximity to the bladder or involving the trigone
 May need a vesico-psoas hitch and/or a Boari flap for a tension free anastomosis
 Usually requires collaboration with urology
- Nephrectomy
 - Can be considered if GFR is less than 10 ml/min
 Observation is also acceptable
 Indicated if there is suspected malignancy

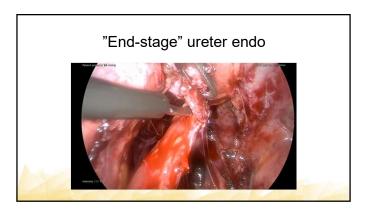
End-to-End outcomes

- A recent review identified 151 published cases
 - 75 laparoscopic
 - 18 laparotomy
 - 1 robot
 - 57 unspecified
- Operating time was about 300 minutes
- Recurrence of obstructive uropathy occurred in 11 cases (7.3%)









Less familiar space - lateral and inferior to the ureter

- Includes the internal iliac vessels, sacral nerve roots, pudendal nerve, lower part of sciatic nerve, sacrospinous ligament, piriformis muscle, coccygeus muscle, levator ani muscle
- The critical structure in this space to identify is the internal iliac vessels, particularly the vein
- Careful "veinolysis" is required before accessing some of the deeper structures in this area

Lateral and inferior to ureter

Less familiar space – lateral and superior to the ureter

- Includes the obturator neurovascular bundle, superior iliac vessels, obturator internus, sciatic nerve, lumbosacral trunk etc
- Two main routes to this space; medial or lateral to the iliac vessels. Often both routes are needed

Lateral and superior to ureter



In summary

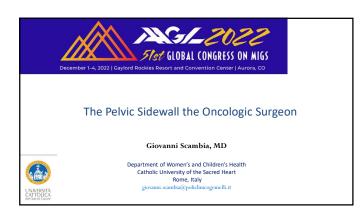
- The ureter is a helpful anatomic landmark during endometriosis surgery of the pelvic sidewall
- Intimate knowledge of ureter and surrounding anatomy is essential
- Ureterolysis is one of the basic principal skills that gynecologic surgeon needs to master
- The area lateral to the ureter is less familiar to laparoscopic surgeons, but mastery of this anatomy is essential for safe performance of complex cases in this area

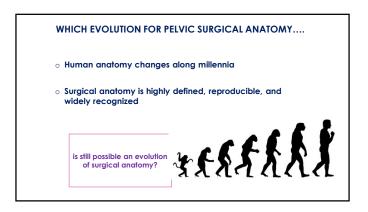
References

- Goggins et al. Ureteroureteral anastomosis for endometriosis involving the ureter: Case series and literature review. J endometriosis and pain disorders. May 2019
- Ajao MO, Einarsson JI. Management of Endometriosis Involving the Urinary Tract. Semin Reprod Med. 2017 Jan;35(1):81-87. doi: 10.1055/s-0036-1597124. Epub 2016 Dec 7. Review. PubMed PMID: 27926970.

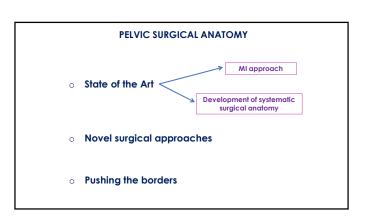


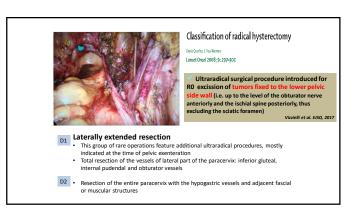


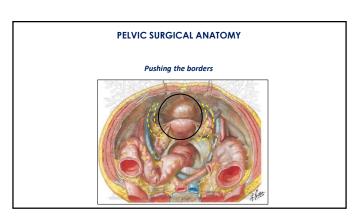




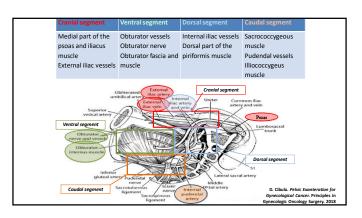


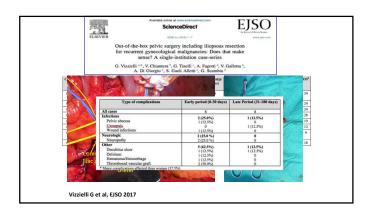


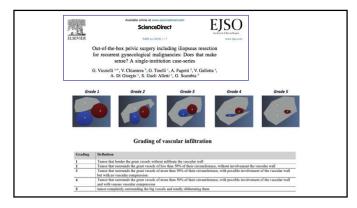












Surgical case Caucasian 48 years old patient. Diagnosis of single pelvic platinum-resistant recurrence after five lines of chemotherapies for serous ovarian cancer G3, stage IIIC PETICT: uptake localized on the right side at level of external iliac region and obturator fosas. No other lesions detected. CT scan: tumor surrounds right external iliac resion and obturator of scan tumor surrounds right external iliac resions and obturator forms, with passable involvement of inguinal canal Surgical procedure: Removal of pelvic and inguinal lymphonodal recurrence (R 0)

Peri-operative outcomes

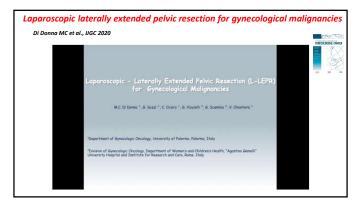
• Operative time: 240 mins.

• Estimated blood loss was 1000 cc.

➤ Discharge time: 15 days
➤ Time to canalization: III day

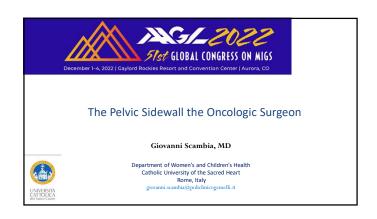
➤ Early\late complications : post operative urinary infection

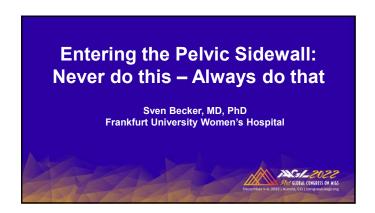




Take home messages

- The continuous borders change lead to the most relevant surgical improvements
- Borders of pelvic surgical anatomy are progressively extending, thus requiring surgeons to continuously update anatomic knowledge
- The surgical borders should not be regarded as fixed indication but defined on a **personalized** based approach







To understand key teaching points from my personal experience To recognize key steps in any pelvic sidewall surgery To improve your surgical abilities through easy-to-grasp technical concepts To acquire 25 years of knowledge compressed into 20 minutes

Objectives

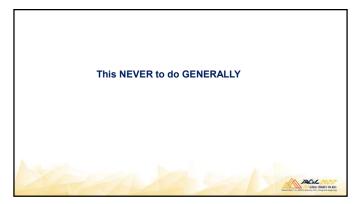
There is so much I want to share with you.

But we only have limited time

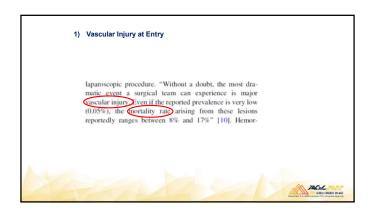
Let's try our best

In the end – everyone will have to be his or her own surgeon

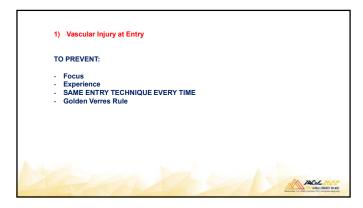


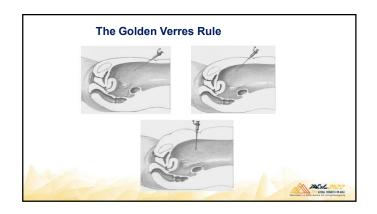


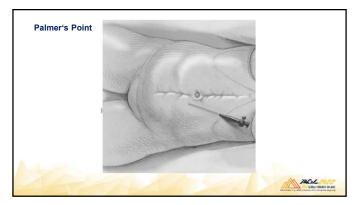




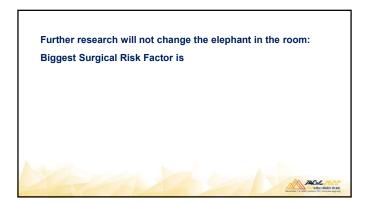


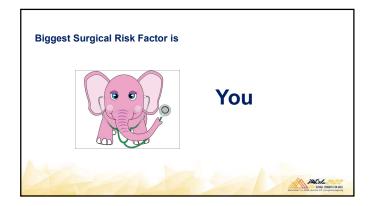


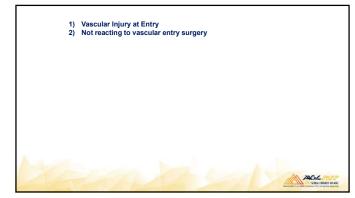




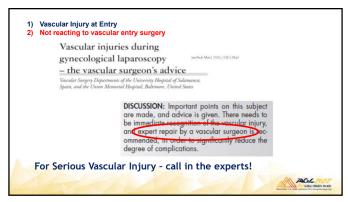


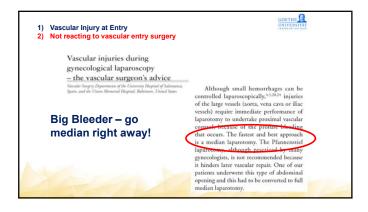


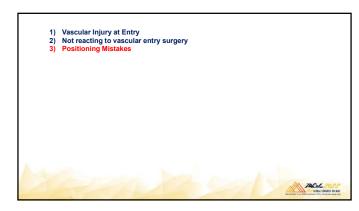


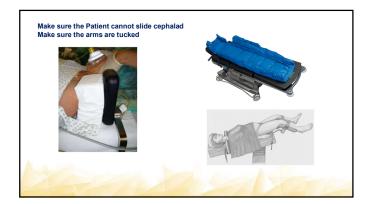


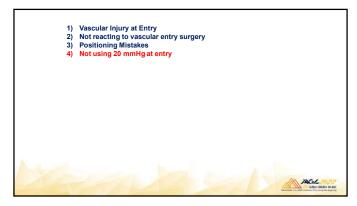


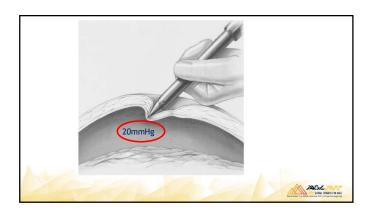


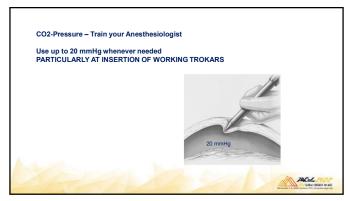


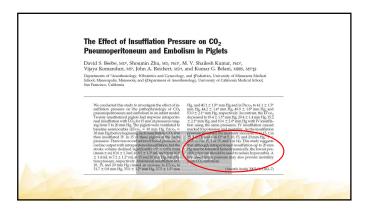


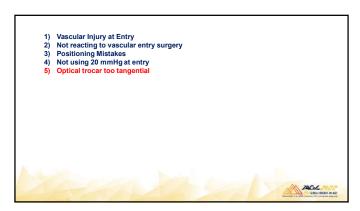






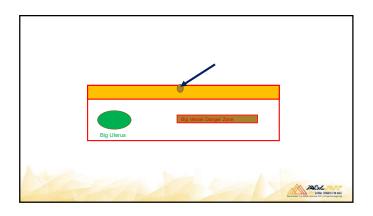


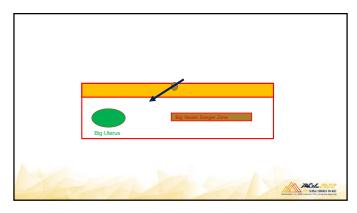


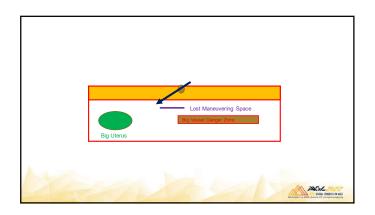


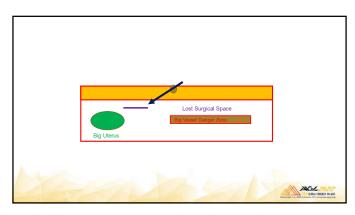


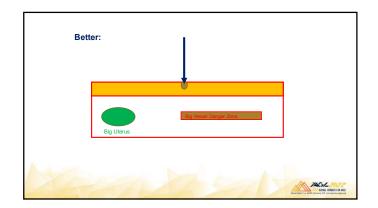


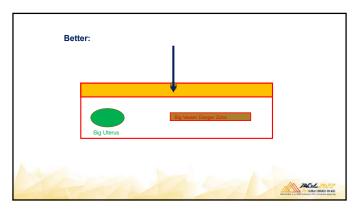


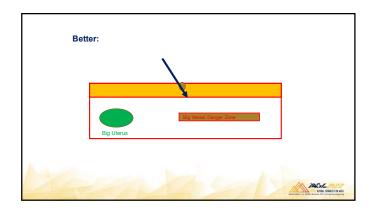


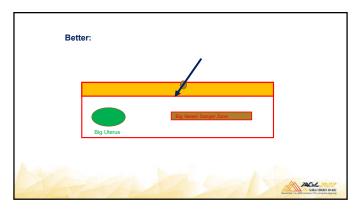


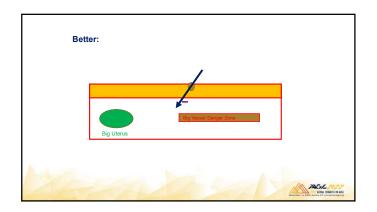


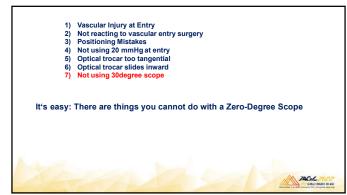


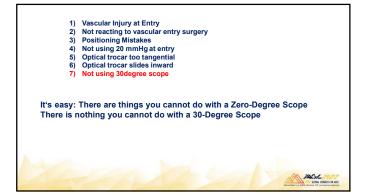


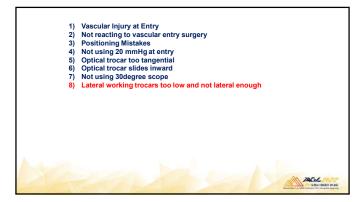


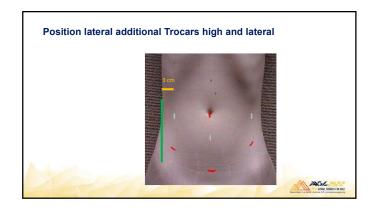


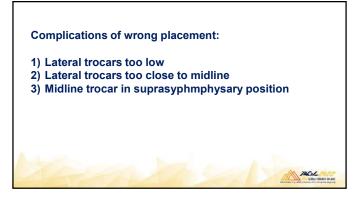


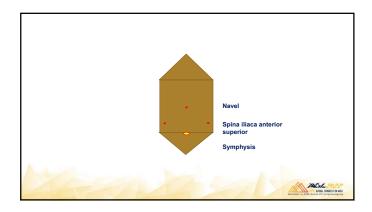


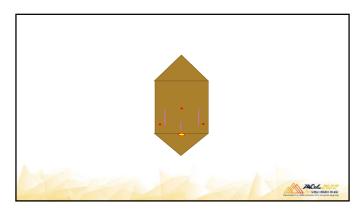










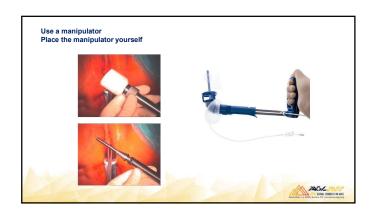


Advantages: 1) You will work away from you 2) An assistant will increase exposure – countertraction and safety 3) The assistant will be on the learing curve 4) You have equal access to both sides

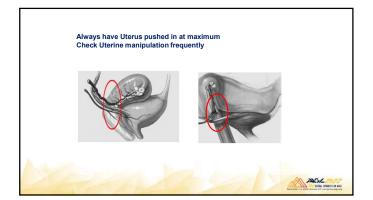












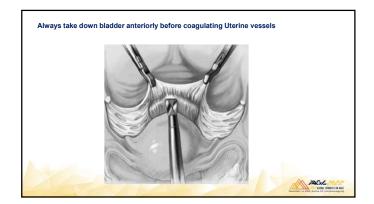


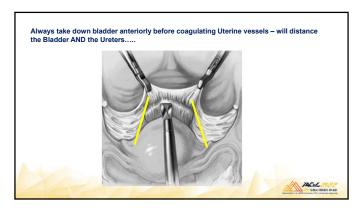
















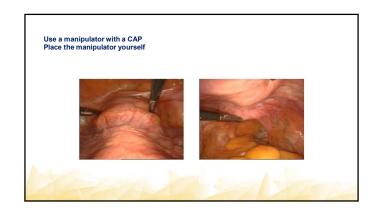
The dirty secret of surgery:

Practise when it is easy

Push your limits when it is easy

The dirty secret of surgery:
Practise when it is easy
Push your limits when it is easy
Then you know how to do it when it is difficult

1) Vascular Injury at Entry
2) Not reacting to vascular entry surgery
3) Positioning Mistakes
4) Not using 20 mmHg at entry
5) Optical trocar too tangential
6) Optical trocar sildes inward
7) Not using 30degree scope
8) Lateral working trocars too low
9) Midline working trocars too low
10) No uterine manipulation
11) Uterus not pushed in sufficiently
12) Small bowel not removed from Douglas
13) Left colonic sidewall adhesions not taken down
14) Pelvic sidewall not opened to visualize ureter
15) Bladder not taken down
16) No Cap used on Manipulator



1) Vascular Injury at Entry
2) Not reacting to vascular entry surgery
3) Positioning Mistakes
4) Not using 20 mmHg at entry
5) Optical trocar too tangential
6) Optical trocar slides inward
7) Not using 30degree scope
8) Lateral working trocars too low
9) Midline working trocars too low
10) No uterine manipulation
11) Uterus not pushed in sufficiently
12) Small bowel not removed from Douglas
13) Left colonic sidewall adhesions not taken down
14) Pelvic sidewall not opened to visualize ureter
15) Bladder not taken down
16) No Cap used on Manipulator
17) Operating "too close" to the problem

Operating "too close" to the problem







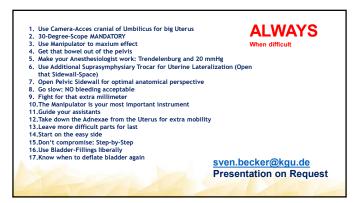
Points to remember – The Basics

1. Check the Setup yourself
2. Make sure the Patient cannot slide cephalad
3. Use a manipulator
4. Place the manipulator yourself
5. Entry: SAME WAY EVERY TIME
6. CO2-Pressure – train your Anesthesiologist
7. Use up to 20 mmHg when needed
8. Use THREE working Trocars
9. Lateral Trocars high and lateral
10. Third main working median Trocar midway between Symphysis and Navel
11. Always take down Sigma-Attachements to lateral Psoas Space/pelvic sidewall
12. Always have Uterus pushed in at maximum
13. Check Uterine manipulation frequently
14. Avoid Bleeding always
15. Make it look beautiful
16. Always take down bladder anteriorly before coagulating Uterine vessels
17. Desvascularize on both sides before cutting to minimize retrograde bleeding
18. Colpotomy: Make sure you have dissected the whole cap
19. Colpotomy: Make sure you have dissected the whole cap
19. Colpotomy: Make sure you have dissected the whole cap
19. Colpotomy: Start opening vagina posteriorly
20. New Technologies will help

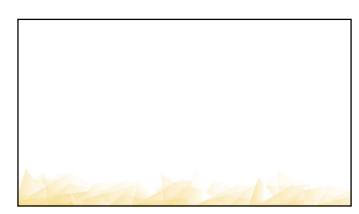




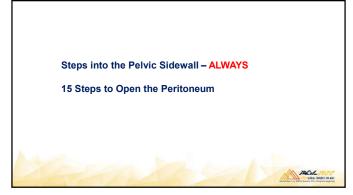


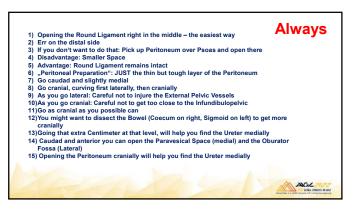


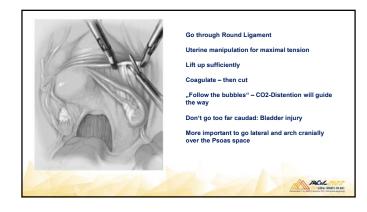


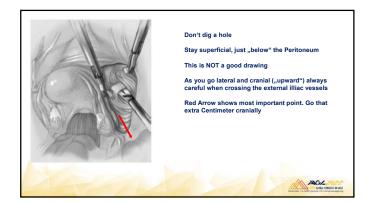


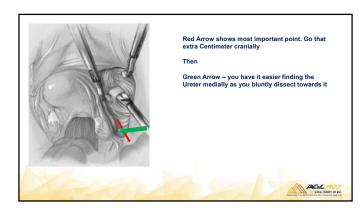




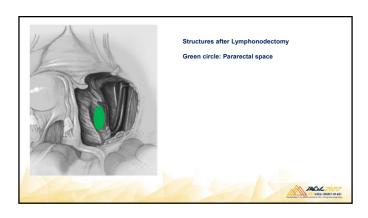


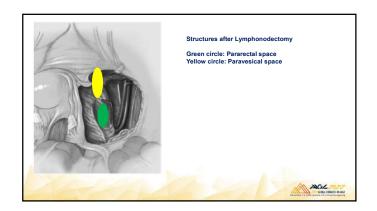


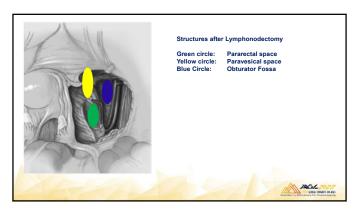


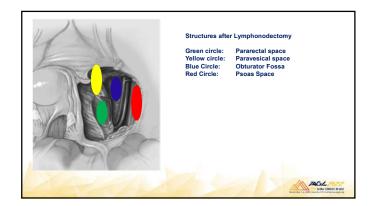


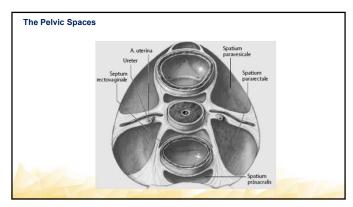


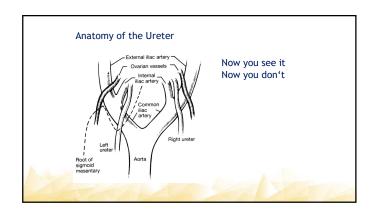


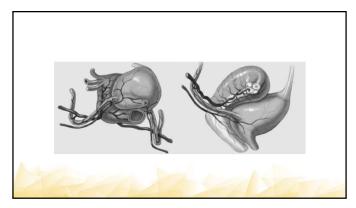




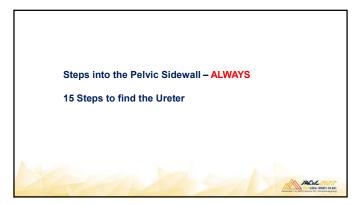


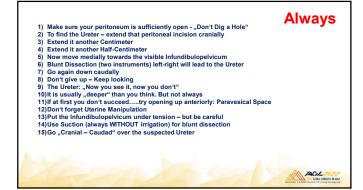


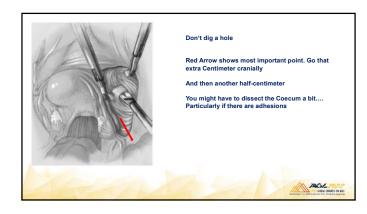


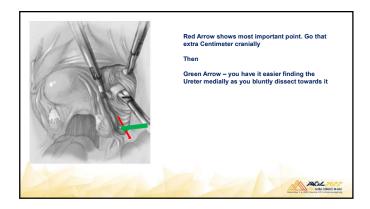


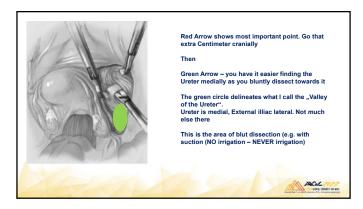




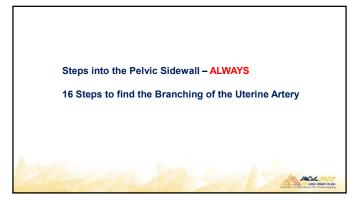




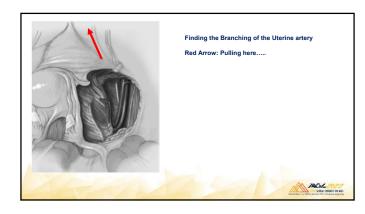


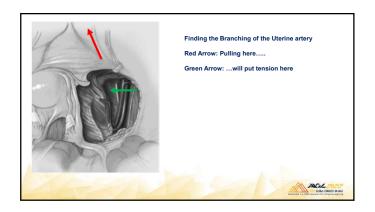


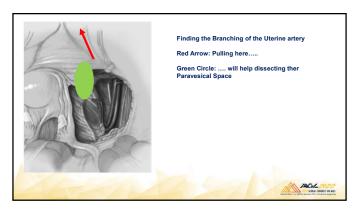
















Steps into the Pelvic Sidewall – Never

Classic Mistakes to be avoided



1) Dig a whole
2) Not avoid bleeding
3) Not create Spaces and Tension with Uterine manipulation
4) Not use enough Trendelenburg and sufficient CO2-Pressure (up to 20mmHg)
5) Not place your Lateral and Medial Trokars high enough
6) Cut Round Ligament too close to Uterus
7) Dissect parallel to Infundibulopelvic Ligament too close to the Ovarian vessels –
Bleedingl (So wide over the Psoas Space)
8) Not understand that extra centimeter in the peritoneal window cranially
9) Dissect the Obturator Fossa (easy) but not the Paravesical Space (just a bit more difficult to some)
10)Not understand the fundamental importance of the Lateral Umbilical Ligament as our main guide in the pelvic sidewall
11)Being too timid
12)Being too couragous
13)Use Irrigation (NEVER use Irrigation)
14)Not understanding "Peritoneal Dissection"
15)Not realizing how close the bladder is caudad and medial to the round ligament
16)Not doing bladder filling before the injury

Words of Wisdom

Arnaud Wattiez

"Sometimes you just have to Cut"

"Follow the bubbles"

Shailesh Puntambekar

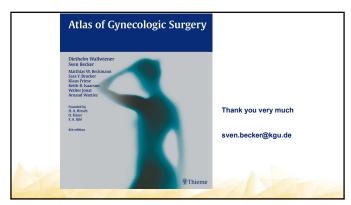
"Fat belongs to the Bladder, Fat belongs to the Bowel"

"Parallel, parallel and Parallel"

Anonymous

"Create Bridges, then take town Bridges"







CULTURAL AND LINGUISTIC COMPETENCY & IMPLICIT BIAS

The California Medical Association (CMA) announced new 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. <u>AAGL is ACCME-accredited and headquartered in California</u>.

CMA developed the standards in response to California legislation (<u>Business and Professions (B&P) Code Section 2190.1</u>), 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 beginning 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 <u>CLC and IB standards page</u> 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)

Cultural Competence In Health and Human Services | NPIN (cdc.gov)

Cultural Competency – The Office of Minority Health (hhs.gov)

Implicit Bias, Microaggressions, and Stereotypes Resources | NEA

Unconscious Bias Resources | diversity.ucsf.edu

Act, Communicating, Implicit Bias (racialequitytools.org)

https://kirwaninstitute.osu.edu/implicit-bias-training

https://www.uptodate.com/contents/racial-and-ethnic-disparities-in-obstetric-and-gynecologic-care-and-role-of-implicitbiases

https://www.contemporaryobgyn.net/view/overcoming-racism-and-unconscious-bias-in-ob-gyn

https://pubmed.ncbi.nlm.nih.gov/34016820/