GLOBAL CONGRESS ON MIGS

AGL 2021

NOVEMBER 14-17 - Austin, Texas

SYLLABUS

Surgical Tutorial 5 - Tips and Tricks for Robotic Surgery
Professional Education Information

Target Audience
This educational activity is developed to meet the needs of surgical gynecologists in practice and in training, as well as other healthcare professionals in the field of gynecology.

Accreditation
AAGL is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The AAGL designates this live activity for a maximum of 1.0 **AMA PRA Category 1 Credit(s)**™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Disclosure of Relevant Financial Relationships
As a provider accredited by the Accreditation Council for Continuing Medical Education, AAGL must ensure balance, independence, and objectivity in all CME activities to promote improvements in health care and not proprietary interests of a commercial interest. The provider controls all decisions related to identification of CME needs, determination of educational objectives, selection and presentation of content, selection of all persons and organizations that will be in a position to control the content, selection of educational methods, and evaluation of the activity. Course chairs, planning committee members, presenters, authors, moderators, panel members, and others in a position to control the content of this activity are required to disclose relevant financial relationships with commercial interests related to the subject matter of this educational activity. Learners are able to assess the potential for commercial bias in information when complete disclosure, resolution of conflicts of interest, and acknowledgment of commercial support are provided prior to the activity. Informed learners are the final safeguards in assuring that a CME activity is independent from commercial support. We believe this mechanism contributes to the transparency and accountability of CME.
# Table of Contents

Session Program (Description and Learning Objectives) ................................................................. 1  
Disclosure ........................................................................................................................................... 2  

Beyond Hysterectomy—Thinking Outside the Box  
J. Mourad ............................................................................................................................................. 3  

Myometrial Closure and Tissue Extraction Tips and Tricks in Robotic Myomectomy  
A. Gargiulo ........................................................................................................................................... 4  

Deep Retroperitoneal and Neuroanatomy  
N. Fogelson .......................................................................................................................................... 5  

Robotic Treatment of Deep Infiltrating Endometriosis  
K. Huang ............................................................................................................................................... UNA  

Optimizing ICG Use for Ureteral Management in Robotic Surgery  
A. Vidali ............................................................................................................................................... UNA
Surgical Tutorial 5-Tips and Tricks for Robotic Surgery

Co-Chairs: Antonio Gargiulo and Kathy Huang

Faculty: Nicholas Fogelson, Jamal Mourad, Andrea Vidali

There is nothing more inspiring than watching master surgeons present difficult cases; however, having the opportunity to absorb their surgical pearls is even better. In this tutorial, we will present the tips and tricks for robotic-assisted laparoscopy from the perspectives of thought leaders in robotic-assisted laparoscopic surgery. We present an array of surgical techniques and pearls to successfully manage complex benign gynecologic conditions. We learn from the experience of high-volume surgeons who have special expertise in difficult hysterectomy, myomectomy, retroperitoneal dissection, neuroanatomy, and deep infiltrating endometriosis.

Learning Objectives: At the conclusion of this course, the participants will be able to: 1) Demonstrate innovative surgical techniques to manage challenging hysterectomy, myomectomy, endometriosis, and pelvic pain; and 2) review the pertinent anatomy, especially that which pertains to deep retroperitoneal dissection and neuroanatomy.

COURSE OUTLINE

2:00 pm  Welcome, Introduction and Course Overview

2:05 pm  Beyond Hysterectomy—Thinking Outside the Box  J. Mourad

2:15 pm  Myometrial Closure and Tissue Extraction Tips and Tricks in Robotic Myomectomy  A. Gargiulo

2:25 pm  Deep Retroperitoneal and Neuroanatomy  N. Fogelson

2:35 pm  Robotic Treatment of Deep Infiltrating Endometriosis  K. Huang

2:45 pm  Optimizing ICG Use for Ureteral Management in Robotic Surgery  A. Vidali

2:55 pm  Questions & Answers

3:00 pm  Adjourn
PLANNER DISCLOSURE
The following members of AAGL have been involved in the educational planning of this workshop (listed in alphabetical order by last name).
Linda J. Bell, Admin Support, AAGL*
Linda D. Bradley, MD, Medical Director, AAGL*
Erin T. Carey, MD, MSCR
Honorarium: Teleflex Medical, MedIQ
Mark W. Dassel, MD
Contracted Research: Myovant Sciences
Linda Michels, Executive Director, AAGL*
Vadim Morozov, MD
Speaker: AbbVie
Consultant: Medtronic, Lumenis
Erinn M. Myers, MD
Speakers Bureau: Laborie Medical Technologies, Teleflex Medical
Other: Unrestricted educational grant to support NC FPMRS Fellow Cadaver Lab: Boston Scientific Corp. Inc.
Amy Park, MD
Speaker: Allergan
Nancy Williams, COO, CME Consultants*
Harold Y. Wu, MD*
Antonio Gargiulo, MD
Consultant: Medicaroid, Lumenis, Inc.
Kathy Huang, MD*

Scientific Program Committee
Mauricio S. Abrão, MD, PhD*
Linda D. Bradley, MD, Medical Director, AAGL*
Francisco Carmona Herrera, MD, PhD
Contracted Research: ADAMED
Speakers Bureau: ADAMED, Gedeon Richter Pharmaceuticals
Consultant: Medtronic
Marcello Ceccaroni, MD, PhD*
Sarah L. Cohen Rassier, MD, MPH*
Julian A. Gingold, MD, PhD*
Charles E. Miller, MD
Consultant: AbbVie, Boston Scientific, Espiner Medical Inc
Contracted Research: Allergan Pharmaceutical, Blue Seas Medical Spa – Investor, Eximis Surgical, Inc.
Speakers Bureau: Allergan Pharmaceutical Jim Tsaltas, MBBS, FRANZCOG
Education Partner and Fellowship Funding: Covidien
Speakers Bureau: Covidien
Audrey T. Tsunoda, MD, MPH
Speakers Bureau: Medtronic, CooperSurgical, Merck & Co., AstraZeneca, Roche
Linda Michels, Executive Director, AAGL*

FACULTY DISCLOSURE
The following have agreed to provide verbal disclosure of their relationships prior to their presentations. They have also agreed to support their presentations and clinical recommendations with the “best available evidence” from medical literature (in alphabetical order by last name).
Nicholas Fogelson, MD*
Antonio Gargiulo, MD
Consultant: Medicaroid, Inc., Lumenis, Inc.
Jamal Mourad, DO, FACOG
Speakers Bureau: Intuitive Surgical
Andrea Vidali, MD
Stock Ownership: Pregmune LLC
Consultant: Intuitive Surgical
Grant Recipient: Lumenis, CONMED Corporation
Kathy Huang, MD*

Content Reviewers have nothing to disclose.

Asterisk (*) denotes no financial relationships to disclose.

All relevant financial relationships noted have been mitigated.
Vertical Cuff Closure Technique

Jamal Mourad, DO; FACOG
University of Arizona College of Medicine - Phoenix

Disclosure

- Speakers Bureau – Intuitive Surgical 2019

Objectives

- Review Vaginal Cuff Anatomy
- Describe the vertical cuff closure technique
- Discuss possible advantages and disadvantages of this technique

Acknowledgments

- Ashley Womack, MD
- Gabriella Smith, MD

References

- Ryan NA, Guan, X. Horizontal Versus Vertical Closure of the Vaginal Cuff at Total Laparoscopic Hysterectomy: The effect of Cuff Closure on Preserving Vaginal Length. JMIG Nov 2014;6 -S173
Myometrial Closure and Tissue Extraction
Tips and Tricks in Robotic Myomectomy

Antonio R. Gargiulo, MD, Harvard Medical School

Disclosure

• Consultant: Medicaroid, Inc. (surgical robotics)
• Consultant: Lumenis, Inc. (surgical lasers)

Myomectomy is Myomectomy: No Shortcuts!
- Myomectomy is a Microsurgical Operation
- “Plan and Plane”
- No Barbecue: How to Achieve Hemostasis
- Standardized Multiple Layer Suturing
- No Minilaparotomy for Tissue Extraction

Robotic Myomectomy: Standard Technique

Robotic Myomectomy: Tissue Extraction
Deep Retroperitoneal Neuroanatomy

Objectives

- Discuss role of pelvic autonomic and somatic nerves in pelvic function
- Demonstrate anatomy of major pelvic nerve structures

Visceral vs Somatic?

Visceral Symptoms

- Dull, aching, generalized pain
- Constipation
- Dull pain with defecation
- Urinary retention / urgency
- Pallor
- Orthostasis
- Mydriasis
- Autonomic Dysfunction

Visceral Symptoms

- Sympathetic afferents (inferior and superior hypogastric plexus / nerves)
- Parasympathetic efferents (pelvic splanchnic nerves from S2-S4 into IHP)
Visceral Symptoms

Pain is felt at the plexus where the signal hits, or higher, not at the end organ!

Somatic Symptoms

Localized pain, knife like
Potential dermatomal radiation
Pain with motion

Visceral Nerves

Afferents -
Superior hypogastric plexus/nerves
Inferior hypogastric plexus/nerve

Efferents -
S2-S4 -> Pelvic Splanchnic nerves -> IHP
S2-S4 -> pudendal nerve

Somatic Symptoms

Pain is felt traveling to the distal extent of the injured or inflamed nerve!

Why would nerves be injured or inflamed?

Endometriosis
Vascular compression
Fibrotic compression
Surgical Injury
Neuropathy

Somatic Nerves

Efferent/Afferent
Femoral nerve (L2-L4)
Obturator Nerve (L2-L4)
Sciatic Nerve and branches (L4-S2)
Pudendal Nerve (S2-S4)
Sacral Roots

Afferent
Genitofemoral (L1 - L2)
Ilioinguinal (L1)
Iliohypogastric (T12-L1)
Nerve Anatomy / Dissection

Superior Hypogastric Plexus / Nerves

Inferior Hypogastric Nerve / Plexus

Superior Hypogastric Plexus

Central structure overlying presacral space
Splits into bilateral inferior hypogastric nerves at approx L5 body

Inferior Hypogastric Nerve / Plexus

Runs from Superior Hypogastric Plexus Deep and lateral to uterosacral ligament
Joins S2/S4 splanchnic to form inferior hypogastric plexus
Genitofemoral Nerve
Obturator Nerve
Sciatic Nerve

Ilioinguinal Nerve (L1)
Iliohypogastric Nerve (T12 / L1)

There is another video to be added
Here in the final version

REFERENCES
Possover M. 2015 Neuropelveology. International School of Neuropelveology, Zurich, Switzerland
THANK YOU
Assembly Bill 1195 was signed into law on July 1, 2006 requiring local CME providers, such as the AAGL, to assist in enhancing the cultural and linguistic competency of California’s physicians (researchers and doctors without patient contact are exempt). This mandate follows the federal Civil Rights Act of 1964, Executive Order 13166 (2000) and the Dymally-Alatorre Bilingual Services Act (1973), all of which recognize, as confirmed by the US Census Bureau, that substantial numbers of patients possess limited English proficiency (LEP). It is the intent of the Legislature to encourage physicians and surgeons, continuing medical education providers located in California, and the Accreditation Council for Continuing Medical Education to meet the cultural and linguistic concerns of a diverse patient population through appropriate professional development.

Linguistic Competence: Providing readily available, culturally appropriate oral and written language services to limited English proficiency (LEP) members through such means as bilingual/bicultural staff, trained medical interpreters, and qualified translators.

Cultural Competence: A set of congruent behaviors, attitudes, and policies that come together in a system or agency or among professionals that enables effective interactions in a cross-cultural framework.1

Cultural and Linguistic Competence: The ability of health care providers and health care organizations to understand and respond effectively to the cultural and linguistic needs brought by the patient to the health care encounter.

Cultural competence requires organizations and their personnel to:

- Value diversity.
- Assess themselves.
- Manage the dynamics of difference.
- Acquire and institutionalize cultural knowledge.
- Adapt to diversity and the cultural contexts of individuals and communities served.

California Business & Professions Code §2190.1(c)(3) states that associations that accredit continuing medical education courses shall develop standards before July 1, 2006, for compliance with the cultural competency requirements. The associations may update these standards, as needed, in conjunction with an advisory group that has expertise in cultural and linguistic competency issues. Cultural competency means a set of integrated attitudes, knowledge, and skills that enables a health care professional or organization to care effectively for patients from diverse cultures, groups, and communities. At a minimum, cultural competency is recommended to include the following: (A) Applying linguistic skills to communicate effectively with the target population. (B) Utilizing cultural information to establish therapeutic relationships. (C) Eliciting and incorporating pertinent cultural data in diagnosis and treatment. (D) Understanding and applying cultural and ethnic data to the process of clinical care, including, as appropriate, information pertinent to the appropriate treatment of, and provision of care to, the lesbian, gay, bisexual, transgender, and intersex communities.

Title VI of the Civil Rights Act of 1964 prohibits recipients of federal financial assistance from discriminating against or otherwise excluding individuals on the basis of race, color, or national origin in any of their activities. In 1974, the US Supreme Court recognized LEP individuals as potential victims of national origin discrimination. In all situations, federal agencies are required to assess the number or proportion of LEP individuals in the eligible service population, the frequency with which they come into contact with the program, the importance of the services, and the resources available to the recipient, including the mix of oral and written language services. Additional details may be found in the Department of Justice Policy Guidance Document: Enforcement of Title VI of the Civil Rights Act of 1964 http://www.usdoj.gov/crt/cor/pubs.htm.

Executive Order 13166, “Improving Access to Services for Persons with Limited English Proficiency”, signed by the President on August 11, 2000 http://www.usdoj.gov/crt/cor/13166.htm was the genesis of the Guidance Document mentioned above. The Executive Order requires all federal agencies, including those which provide federal financial assistance, to examine the services they provide, identify any need for services to LEP individuals, and develop and implement a system to provide those services so LEP persons can have meaningful access.

Dymally-Alatorre Bilingual Services Act (Assembly Bill 305) requires that state agencies that serve a substantial number of non-English-speaking people employ a sufficient amount of bilingual persons in order to provide certain information and render certain services in a language other than English.