Applied Anatomy in Female Pelvic Surgery (Didactic)

PROGRAM CHAIR
Andrew I. Brill, MD
**Professional Education Information**

**Target Audience**
This educational activity is developed to meet the needs of residents, fellows and new minimally invasive specialists in the field of gynecology.

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

The AAGL designates this live activity for a maximum of .75 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

Course Description........................................................................................................................................ 1
Disclosure ...................................................................................................................................................... 2
Applied Anatomy in Female Pelvic Surgery – Video Challenge
A.I. Brill .......................................................................................................................................................... 3
Cultural and Linguistics Competency .......................................................................................................... 13
Morning Lecture
Applied Anatomy in Female Pelvic Surgery

Andrew I. Brill, Chair

This opening session will review key topographical anatomy of the surgical pelvis using video from cadaveric dissections and live pelvic surgery, the key anatomical structures within the deep pelvic sidewall and retropubic space will be reviewed. These dissections will highlight best surgical practice to maximize hemostasis and reduce risk to visceral and vascular structures.

Learning Objectives: At the conclusion of this activity, the participant will be able to: 1) Describe the key topographical anatomy of the pelvis; 2) describe the important anatomical structures of the anterior abdominal wall; 3) adopt surgical strategies to minimize risk to visceral and vascular structures; and 4) employ techniques to dissect the pelvic ureter and retroperitoneal vascular structures.
PLANNER DISCLOSURE
The following members of AAGL have been involved in the educational planning of this workshop and have no conflict of interest to disclose (in alphabetical order by last name).
Art Arellano, Professional Education Manager, AAGL*
Viviane F. Connor
Consultant: Conceptus Incorporated
Kimberly A. Kho*
Frank D. Loffer, Executive Vice President/Medical Director, AAGL*
LindaMichels, Executive Director, AAGL*
M. Jonathan Solnik*
Johnny Yi*

SCIENTIFIC PROGRAM COMMITTEE
Ceana H. Nezhat
Consultant: Ethicon Endo-Surgery, Lumenis, Karl Storz
Other: Medical Advisor: Plasma Surgical
Other: Scientific Advisory Board: SurgiQuest
Arnold P. Advincula
Consultant: Blue Endo, CooperSurgical, Covidien, Intuitive Surgical, SurgiQuest
Other: Royalties: CooperSurgical
Linda D. Bradley*
Victor Gomel*
Keith B. Isaacson*
Grace M. Janik
Grants/Research Support: Hologic
Consultant: Karl Storz
C.Y. Liu*
Javier F. Magrina*
Andrew I. Sokol*

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).
Andrew I. Brill
Consultant: CooperSurgical, Ethicon Endo-Surgery, Hologic, Karl Storz, Smith & Nephew
Speakers Bureau: CooperSurgical, Ethicon Endo-Surgery, Karl Storz, Smith & Nephew

Asterisk (*) denotes no financial relationships to disclose.
Disclosures

- Consultant: CooperSurgical, Ethicon Endo-Surgery, Hologic, Smith & Nephew Endoscopy, Karl Storz
- Speakers Bureau: CooperSurgical, Ethicon Endo-Surgery, Smith & Nephew Endoscopy, Karl Storz

Learning Objectives

- Recognize key topography of the pelvis
- Describe the key vascular structures of the anterior abdominal wall
- Compare different surgical strategies to minimize risk to vital structures
- Explain the vascular anatomy of the sidewall
- Employ techniques to safely dissect the pelvic ureter and retroperitoneal vascular structures

Why Master Surgical Anatomy?

- More Efficient ➔ Faster
- More Effective ➔ Better Results
- More Confident ➔ Safer

Can Minimize Complications!
Identifying the Inferior Epigastric Vessels
Genito-femoral Nerve

Femoral Nerve

Inguinal Canal

Inguinal Canal

Median

Lateral

Medial

Anatomy

Dissection

Principles of Safe Surgical Dissection

Only cut into structures that are visible and are understood
Louis Sullivan, architect, 1896

"It is the pervading law of all things organic and inorganic, of all things physical and metaphysical, of all things human and all things superhuman, of all true manifestations of the head, of the heart, of the soul, that the life is recognizable in its expression, that form ever follows function. This is the law."

---

**Blood Vessels**

**Lymphatics**

**Nerves**

---

**Form and Function (Dissection) are inseparable**

- Mobilize tissue in a curvilinear fashion
- Dissect and tract in parallel to large blood vessels
- Use tension-countertension to layer & transilluminate
- Grasp peritoneum and tract perpendicular to the target
- Tract medially with relaxing incision to move the ureter
- Identify underlying fatty interface to beneath peritoneum

---

**The Fat – NonFat Interface**

---

**Dissecting the Pelvic Sidewall**
Pelvic Sidewall – 3 Surgical Layers

- Ureter
- Internal iliac vessels
- Cardinal ligament sheath
- External iliac vessels
- Obturator vessels and muscle

Lateral Pelvic Sidewall: Surgical Layers

Para-rectal Space

Para-rectal Space with parasympathetic fibers
Para-rectal Space

- Vaginal Artery
- Uterine Artery
- Ureter
- Obliterated Umbilical Artery

Middle Rectal Artery

Obturator Space

- Levator Ani Muscle
- Middle Rectal Artery
- Ant. Div. Internal Iliac
- Ureter
- External Iliac Vein

Obturator Artery

Obturator Nerve

Obturator Vein

External Iliac Vein
Dissecting the Pelvic Sidewall

Space of Retzius

Space of Retzius

Space of Retzius

Space of Retzius
Anatomy is to physiology as geography is to history; it describes the theatre of events.

Jean Francois Fernel
De Naturali Parte Medicinae Libri Septem (1542), Ch. 1.

THANK YOU
CULTURAL AND LINGUISTIC COMPETENCY

Governor Arnold Schwarzenegger signed into law AB 1195 (eff. 7/1/06) 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).

California Business & Professions Code §2190.1(c)(3) requires a review and explanation of the laws identified above so as to fulfill AAGL’s obligations pursuant to California law. Additional guidance is provided by the Institute for Medical Quality at http://www.imq.org

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 (California Government Code §7290 et seq.) requires every California state agency which either provides information to, or has contact with, the public to provide bilingual interpreters as well as translated materials explaining those services whenever the local agency serves LEP members of a group whose numbers exceed 5% of the general population.

~

If you add staff to assist with LEP patients, confirm their translation skills, not just their language skills. A 2007 Northern California study from Sutter Health confirmed that being bilingual does not guarantee competence as a medical interpreter. http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2078538.