Plenary 5: Urogynecology

MODERATORS
John L. Marlow, MD
Licia Raymond, MD
Bruno J. van Herendael, MD

DISCUSSANTS
Ali Ghomi, MD
Andrew I. Sokol, MD
Bernard Taylor, MD
Paulami Guha, MD
Peter L. Rosenblatt, MD
Lan Zhu, MD

Erinn Myers, MD
Eric R. Sokol, MD
Charles R. Hanes, MD
Megan N. Wasson, DO
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 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

Course Description ........................................................................................................................................ 1

Disclosure ...................................................................................................................................................... 2

Necessity of Morcellation at Time of Vaginal Hysterectomy
Megan N. Wasson ........................................................................................................................................ 4

The Utility of Near-Infrared Florescence Imaging in Robotic-Assisted Sacrocolpopexy (RASC)
Paulami Guha ................................................................................................................................................ 7

The Value of the Preoperative 1-Hour Pad Test With Pessary Insertion to Predict the Need for a Mid-Urethral Sling Following Pelvic Prolapse Surgery: A Cohort Study
Lan Zhu .......................................................................................................................................................... 10

A Novel Approach to Sacral Fixation During LSH and Sacrocervicopexy for Uterovaginal Prolapse
Peter L. Rosenblatt ...................................................................................................................................... 12

Natural Orifice Sacral Colpopexy
Charles R. Hanes .................................................................................................................................... 13

Cultural and Linguistics Competency ......................................................................................................... 14
Plenary 5: Urogynecology

Moderators: John L. Marlow, Licia Raymond, Bruno J. van Herendael

Discussants: Ali Ghomi, Erinn Myers, Andrew I. Sokol, Eric R. Sokol, Bernard Taylor

Faculty: Paulami Guha, Charles R. Hanes, Peter L. Rosenblatt, Megan N. Wasson, Lan Zhu

This session will present studies concerning morcellation and vaginal hysterectomy, visualization of pelvic vascularity and fixation sutures during prolapse surgery and predicting incontinence that occurs after prolapse surgery.

Learning Objectives: At the conclusion of this course, the clinician will be able to: 1) Discuss morcellation and vaginal hysterectomy, issues of prolapse pelvic surgery including the use of mesh and fixation sutures, visualizing pelvic vascularity and predicting post operative incontinence.

Course Outline

11:00 Necessity of Morcellation at Time of Vaginal Hysterectomy M.N. Wasson
11:06 Discussant B. Taylor
11:10 The Utility of Near-Infrared Florescence Imaging in Robotic-Assisted Sacrocolpopexy (RASC) P. Guha
11:16 Discussant A. Ghomi
11:20 The Value of the Preoperative 1-Hour Pad Test With Pessary Insertion to Predict the Need for a Mid-Urethral Sling Following Pelvic Prolapse Surgery: A Cohort Study L. Zhu
11:26 Discussant A.I. Sokol
11:30 Video: A Novel Approach to Sacral Fixation During LSH and Sacrocervicopexy for Uterovaginal Prolapse P.L. Rosenblatt
11:36 Discussant E.R. Sokol
11:40 Video: Natural Orifice Sacral Colpopexy C.R. Hanes
11:46 Discussant E. Myers
11:50 Questions & Answers
12:00 Adjourn
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*
Amber Bradshaw
Speakers Bureau: Myriad Genetics Lab
Other: Proctor: Intuitive Surgical
Erica Dun*
Frank D. Loffer, Medical Director, AAGL*
Linda Michels, Executive Director, AAGL*
Johnny Yi*

SCIENTIFIC PROGRAM COMMITTEE
Arnold P. Advincula
Consultant: Intuitive
Royalty: CooperSurgical
Sarah L. Cohen*
Jon I. Einarsson*
Stuart Hart
Consultant: Covidien
Speakers Bureau: Boston Scientific, Covidien
Kimberly A. Kho
Contracted/Research: Applied Medical
Other: Pivotal Protocol Advisor: Actamax
Matthew T. Siedhoff
Other: Payment for Training Sales Representatives: Teleflex
M. Jonathon Solnik
Consultant: Z Microsystems
Other: Faculty for PACE Surgical Courses: Covidien

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).
Ali Ghomi*
Paulami Guha*
Charles R. Hanes*
John L. Marlow*
Erinn Myers*
Licia Raymond*
Peter L. Rosenblatt
Consultant: American Medical Systems, Boston Scientific Corp., Inc., Coloplast, Covidien, Endo Evolution, LLC, HALO Medical, Medtronic
Contracted/Research: Boston Scientific Corp., Inc.
Royalty: Cook Medical, UpToDate
Andrew I. Sokol*
Eric R. Sokol
Other: National Principal Investigator: American Medical Systems
Contracted Research: AcCell, Coloplast, Cook Medical, ELEN.SpA
Stock Ownership: Pelvalon
Bernard Taylor
Speakers Bureau: American Medical Systems, Boston Scientific Corp. Inc., Coloplast
Bruno Van Herendael  
Consultant: Karl Storz  
Other: Instructor: Bayer Healthcare Corp., Karl Storz  
Megan N. Wasson*  
Lan Zhu*  

Asterisk (*) denotes no financial relationships to disclose.
Necessity of Morcellation at Time of Vaginal Hysterectomy

Megan Wasson, DO
Mayo Clinic Arizona Department of Gynecologic Surgery

Objective
• Assess the likelihood of morcellation being required at the time of vaginal hysterectomy.
• Determine predictability of needing to perform morcellation at the time of vaginal hysterectomy

Introduction
• Vaginal hysterectomy compared to laparotomy¹
  • Fewer perioperative complications
  • Shorter hospital stay
  • Decreased pain
  • Improved quality of life
  • Quicker return to work

2009 ACOG Committee Opinion²
• “…when feasible, vaginal hysterectomy is the safest and most cost-effective route by which to remove the uterus.”
  • “Vaginal hysterectomy is the approach of choice whenever feasible…”

2011 AAGL Position Statement³
• “…most hysterectomies for benign disease should be performed either vaginally or laparoscopically and that continued efforts should be taken to facilitate these approaches.”

Disclosures
I have no financial relationships to disclose
Materials and Methods

- Retrospective cohort study
- Inclusion Criteria
  - All women undergoing total vaginal hysterectomy
- Primary Outcome
  - Utilization of morcellation at the time of vaginal hysterectomy
- Secondary Outcomes - peri-operative data

Results

- Total Vaginal Hysterectomy (n=743)
  - Intact uterine removal (n=383; 51.55%)
  - Uterine removal utilizing morcellation (n=360; 48.45%)

Pre-Operative Characteristics

<table>
<thead>
<tr>
<th></th>
<th>No morcellation (n=383)</th>
<th>Morcellation (n=360)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Time of Surgery (years)</td>
<td>59.3 (SD=13.0)</td>
<td>48.3 (SD=8.3)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Body Mass Index (kg/m²)</td>
<td>26.8 (SD=5.5)</td>
<td>27.4 (SD=8.5)</td>
<td>0.346</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>n=6 (1.6%)</td>
<td>n=8 (2.2%)</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>n=5 (1.3%)</td>
<td>n=16 (4.4%)</td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>n=2 (0.5%)</td>
<td>n=21 (5.8%)</td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>n=360 (94.0%)</td>
<td>n=294 (81.7%)</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>n=10 (2.6%)</td>
<td>n=21 (5.9%)</td>
<td></td>
</tr>
<tr>
<td>American Society of Anesthesiologists (ASA) Class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>n=0 (0.0%)</td>
<td>n=32 (8.4%)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>n=32 (8.4%)</td>
<td>n=53 (14.9%)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>n=272 (71.6%)</td>
<td>n=261 (73.3%)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>n=74 (19.5%)</td>
<td>n=41 (11.5%)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>n=2 (0.5%)</td>
<td>n=1 (0.3%)</td>
<td></td>
</tr>
</tbody>
</table>

Parity | 2.5 | 1.8 | <0.001 |
Prior Vaginal Delivery | 2.3 | 1.5 | <0.001 |
Prior Cesarean Delivery | 0.1 | 0.3 | 0.003 |
Surgical History
  - Prior Laparoscopy | 0.4 | 0.5 | 0.338 |
  - Prior Laparotomy | 0.2 | 0.3 | 0.136 |

Intra-Operative Characteristics

<table>
<thead>
<tr>
<th></th>
<th>No morcellation (n=383)</th>
<th>Morcellation (n=360)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Blood Loss (mL)</td>
<td>129.3 (SD=102.2)</td>
<td>196.0 (SD=238.6)</td>
<td>0.002</td>
</tr>
<tr>
<td>Surgery Duration (min)</td>
<td>103.5 (SD=43.0)</td>
<td>93.6 (SD=48.3)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Uterine Weight (g)</td>
<td>78.5 (SD=50.3)</td>
<td>274.7 (SD=255.5)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Concomitant Anterior and/or Posterior Colporrhaphy</td>
<td>n=251 (65.5%)</td>
<td>n=56 (15.6%)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Post-Operative Characteristics

<table>
<thead>
<tr>
<th></th>
<th>No morcellation (n=383)</th>
<th>Morcellation (n=360)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathologic Findings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leiomyoma</td>
<td>n=159 (41.5%)</td>
<td>n=247 (68.6%)</td>
<td></td>
</tr>
<tr>
<td>Adenomyosis</td>
<td>n=74 (19.3%)</td>
<td>n=54 (15.0%)</td>
<td></td>
</tr>
<tr>
<td>No significant Pathology</td>
<td>n=92 (24.0%)</td>
<td>n=36 (10.0%)</td>
<td></td>
</tr>
<tr>
<td>Endometrial Hyperplasia or Cervical Dysplasia</td>
<td>n=21 (5.5%)</td>
<td>n=15 (4.2%)</td>
<td></td>
</tr>
<tr>
<td>Endometrial Polyp</td>
<td>n=22 (5.7%)</td>
<td>n=6 (1.7%)</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>n=15 (3.9%)</td>
<td>n=2 (0.6%)</td>
<td></td>
</tr>
<tr>
<td>Length of Stay</td>
<td>1.3 (SD=0.9)</td>
<td>1.1 (SD=0.9)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
Multivariate Logistic Model

<table>
<thead>
<tr>
<th></th>
<th>Exp(B)</th>
<th>Standard Error</th>
<th>95% Confidence Interval</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without vs. With Concomitant Anterior and/or Posterior Colporrhaphy</td>
<td>3.865</td>
<td>0.236</td>
<td>2.435-6.136</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Pathological Findings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adenomyosis vs. Endometrial Hyperplasia or Cervical Dysplasia</td>
<td>2.254</td>
<td>0.509</td>
<td>0.831-6.114</td>
<td>0.111</td>
</tr>
<tr>
<td>No significant Pathology vs. Endometrial Hyperplasia or Cervical Dysplasia</td>
<td>1.925</td>
<td>0.520</td>
<td>0.694-5.339</td>
<td>0.208</td>
</tr>
<tr>
<td>Cancer vs. Endometrial Hyperplasia or Cervical Dysplasia</td>
<td>0.155</td>
<td>1.055</td>
<td>0.020-1.229</td>
<td>0.078</td>
</tr>
<tr>
<td>Leiomyoma vs. Endometrial Hyperplasia or Cervical Dysplasia</td>
<td>2.766</td>
<td>0.484</td>
<td>1.072-7.137</td>
<td>0.035</td>
</tr>
<tr>
<td>Endometrial Polyp vs. Endometrial Hyperplasia or Cervical Dysplasia</td>
<td>0.994</td>
<td>0.735</td>
<td>0.235-4.203</td>
<td>0.994</td>
</tr>
<tr>
<td>Prior Vaginal Delivery</td>
<td>0.785</td>
<td>0.086</td>
<td>0.664-0.929</td>
<td>0.005</td>
</tr>
<tr>
<td>Uterine Weight (g)</td>
<td>1.020</td>
<td>0.002</td>
<td>1.016-1.024</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Final Conclusion
- Vaginal morcellation is more likely to be required at the time of vaginal hysterectomy
- Uterine leiomyomas
- Higher uterine weight
- No history of vaginal delivery
- No uterovaginal prolapse

Further Research
- Vaginal morcellation and dissemination of disease
  - Benign
    - Iatrogenic peritoneal leiomyomatosis
  - Endometriosis
  - Malignant
    - Uterine leiomyosarcoma
    - Endometrial carcinoma
    - Cervical carcinoma

References

Questions
The Utility of Near-Infrared Fluorescence Imaging in Robotic-Assisted Sacrocolpopexy

PAULAMI GUHA, MD.
RIVERSIDE REGIONAL MEDICAL CENTER, VA.

I have no financial relationships to disclose...

• To determine if utilization of the da Vinci Firefly™ imaging system and ICG contrast, during robot-assisted sacrocolpopexy could help identify the middle sacral artery (MSA) during presacral dissection.

• Discuss secondary outcomes which includes pre-sacral dissection time, blood loss, and surgeon’s assessment of overall helpfulness of the technology

Risks of Sacrocolpopexy

• Small bowel obstruction
  – Reduced by reperitonealization

• Mesh erosion
  – Mesh selection important
    • Type I synthetic monofilament
    • Large pore size

• Presacral hemorrhage
  – Difficult to stop
    • Vessels retract into bone
  – 10% reported risk of transfusion
  – 4% reported risk of life-threatening hemorrhage1,2,3

Materials and Methods

• Study Design: Prospective review of cases

• Setting: Private hospital, single surgeon

• Patients: 267 consecutive cases of women undergoing robot-assisted ASC for, at minimum, stage 2 three-compartment POP from November 2011 to February 2015

The following pre-determined outcomes were recorded:

- Number of cases where the MSA was identified by white light alone and the number of cases where the MSA was identified by Firefly,
- The time from contrast injection (ICG) to visualization of the MSA
- Total pre-sacral dissection time
- Blood loss during pre-sacral dissection (none/nil/moderate)
Results

- A total of 267 procedures during the study interval met the entry criteria and were included in the study
- Mean age of all subjects was 55 (S.D-10.8) years
- The mean time for visualization of the pre-sacral vasculature after contrast injection was 44(S.D-26.2) seconds
- No significant sacral bleeding, requiring transfusion, occurred in any of the cases
- No intra or peri-operative complications occurred in this series of cases
- No allergies or side effects of the ICG were noted

Total cases reviewed
267 cases

<table>
<thead>
<tr>
<th>Cases in which the MSA was seen with white light alone before Firefly</th>
<th>Cases in which the MSA was seen with firefly only and not by white light</th>
<th>Cases in which the MSA was not seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>37 (14%)</td>
<td>191 (72%)</td>
<td>39 (14%)</td>
</tr>
</tbody>
</table>

Comparison of presacral dissection time with white light only (where MSA was not identified) vs. Firefly

Comparison of amount of bleeding during pre-sacral dissection with white light only (where MSA was not identified) vs. Firefly

P<0.05 (by Mann-Whitney U test)
Conclusions

• Use of the Firefly™ system during RASC
  - increases the rate of identification of the pre-sacral vasculature
  - significantly reduces pre-sacral dissection time
  - reduces blood loss
  - and was graded as very helpful in over 90% of cases

• The addition of the Firefly system with ICG contrast media is an inexpensive way to reduce the rate of complications during RASC cases

• These findings still need to be confirmed in a RCT comparing the Firefly technology to the use of white light alone

REFERENCES


The value of the preoperative 1h pad test with pessary insertion to predict the need for a MUS following pelvic prolapse surgery: A cohort study

Lan Zhu
Dept of OB&GYN Peking Union Medical College Hospital
Beijing, China

I have no financial relationships to disclose

Definition of OSUI

IUGA/ICS Standardization and Terminology Committees
• stress incontinence only observed after the reduction of coexistent prolapse.

Operation Options
One-step Approach: prophylactic anti-incontinence procedure with prolapse surgery
Two-step Approach: postoperative evaluation on the need of anti-incontinence procedure
No specific suggestions

OBJECTIVES
Should SUI Prevention at the time of Anterior Prolapse Surgery in OSUI Patients?
To estimate the value of preoperative 1h pad test with pessary insertion to predict the need for subsequent MUS following prolapse surgery

METHODS
From January 2011 to December 2013
Data were collected from 224 Severe POP patients
Follow-up visits, scheduled at 3, 6 months and then annually

Baseline Evaluation
Preoperatively
standard medical and (uro)gynecological history
stress test, 1-h pad test and uroflowmetry with prolapse reduction

Postoperatively
detailed (uro)gynecological history, clinical examination
primary outcome measure: de novo UI (SUI/ UU/ MUI)
Subjective outcome measurement: UDI-6 and IIQ-7
Objective outcome: stress test or 1h pad test (if needed), and uroflowmetry in the clinic

Inclusion criteria
Stage III or higher
Aa must be greater than or equal to -1 cm
Stress test before prolapse reduction was negative
No history of prior anti-incontinence surgery

Exclusion criteria
Previous or concomitant anti-incontinence surgeries
Insufficient or incomplete pre or postoperative testing or data collection
Demographic Characteristics

A total of 206 patients ultimately were considered for statistical evaluation. Median follow-up time: 31 months (range 12-48 months)

- OSUI group 45 patients (22%)
- No OSUI group 161 patients (78%)

**Univariate and Multivariate Analyses of the Association Between Factors and the Postoperative de novo SUI**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Adjusted OR (95% CI)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, y</td>
<td>1.01 (0.96-1.06)</td>
<td>0.613</td>
</tr>
<tr>
<td>Parity</td>
<td>2.5 (1.02-6.03)</td>
<td>0.045</td>
</tr>
<tr>
<td>Hysterectomy</td>
<td>3.2 (1.03-9.9)</td>
<td>0.044</td>
</tr>
<tr>
<td>Body mass index &gt;28 (obesity)</td>
<td>2.17 (1.03-4.5)</td>
<td>0.041</td>
</tr>
<tr>
<td>BMI (per kg/m²)</td>
<td>1.00 (0.95-1.05)</td>
<td>0.919</td>
</tr>
<tr>
<td>Postmenopausal</td>
<td>3.0 (1.01-9.1)</td>
<td>0.046</td>
</tr>
<tr>
<td>Anterior colporrhaphy, yes vs no</td>
<td>3.0 (1.02-9.1)</td>
<td>0.046</td>
</tr>
<tr>
<td>Posterior defect (more than stage II, yes vs no)</td>
<td>3.0 (1.02-9.1)</td>
<td>0.046</td>
</tr>
<tr>
<td>Apical defect (more than stage II, yes vs no)</td>
<td>3.0 (1.02-9.1)</td>
<td>0.046</td>
</tr>
<tr>
<td>OSUI symptoms score</td>
<td>1.0 (1.0-1.1)</td>
<td>0.001</td>
</tr>
</tbody>
</table>

ROC curve analysis

**Preoperative 1h pad test for predicting the need for MUS after prolapse surgery**

- **Cut-off value 1.9g**
  - The area under ROC curve: 0.816±0.085 (95% CI: 0.649-0.983)
  - Sensitivity 80%
  - Specificity 84%

Conclusions

- **One-step approach VS Two-step approach. Recommend two-stage surgery because most of the de novo UI are mild**
- **Patients with occult SUI experienced higher de novo UI rate**
- **Preoperative 1h pad test>1.9g = Higher risk of de novo UI need subsequent MUS after prolapse surgery**
- **OSUI and Concomitant Hysterectomy were identified as independent risk factors related to de novo UI**

Doctors and Patients should make sufficient communication, co-decision, and balance between benefits and risks
Objective: To demonstrate a novel approach to sacrocervicopexy that addresses the recognized difficulty in placing fixation sutures in the sacral promontory.

Design: Stepwise demonstration of the technique with narrated video footage.

Setting: Sacrocervicopexy is a common procedure performed to treat uterovaginal prolapse. Our patient is a 42-year-old sexually active woman with symptomatic Stage II uterovaginal prolapse. She desired definitive surgical management and a laparoscopic supracervical hysterectomy with bilateral salpingectomy and sacrocervicopexy was performed.

Interventions: Key steps of our procedure:

1. The laparoscopic supracervical hysterectomy was completed in standard fashion and the uterine fundus was amputated with a bipolar loop.
2. The cervix was then cored vaginally and a 12 mm cannula was inserted.
3. Dissection in the presacral, rectovaginal and vesicovaginal spaces was performed and the light-weight, polypropylene mesh was anchored to the cervix and vagina with permanent sutures.
4. The uterus was removed through a posterior colpotomy, beyond the distal edge of the posterior vaginal mesh.
5. An automated suturing device (Endo360, EndoEvolution, Raynham, MA) was introduced through the cervical port. Two sutures were placed in the anterior longitudinal ligament of the sacrum.

Conclusion: It has been demonstrated by Good M, et al. that the most prominent structure in the presacral space is the L5-S1 disc, and that surgeons often incorrectly place sacral fixation stitches in this area, which may lead to discitis. Our novel approach with introduction of the Endo360 device through the cervical port provides an anatomically accurate, precise and reproducible placement of sacral fixation sutures at the S1 level. Good anatomical knowledge ensures proper fixation of the mesh to the sacrum.
Objective: To show that the transvaginal, retroperitoneal dissection to the sacral promontory can be performed safely with a combination of indirect and direct visualization.

Design: Demonstration of the natural orifice sacral colpopexy with narrated video footage.

Setting: Sacral colpopexy is considered by many to be the “gold standard” for restoration of apical vaginal support. Technical difficulty and safety have been the major impediments to this operation being performed through the most direct route, the vagina.

Interventions: The transvaginal approach is shown. The indirect (transperitoneal) visualization of the retroperitoneal dissection by way of the open enterocele clearly shows how the dissection is safely performed. Retractors placed within the retroperitoneal space then enable direct visualization of the anterior longitudinal ligament at the S-1 level for attachment of the synthetic mesh.

Conclusion: The ability to perform a safe transvaginal, retroperitoneal sacral colpopexy has been hampered by the perception that the dissection to the anterior longitudinal ligament at the S-1 level is difficult and fraught with danger. The technique described demonstrates that the anatomic space is safe and easily accessible. The general advantages of vaginal surgery including decreased morbidity and cost are potential benefits of the natural orifice sacral colpopexy. In addition, full access to all pelvic floor compartments is a specific advantage that facilitates repair of all prolapse defects.
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](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](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](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](http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2078538).