Plenary 5: Urogynecology

MODERATOR
Jim W. Ross, MD, PhD

CO-MODERATOR
Robert S. Furr, MD

DISCUSSANTS
Bruce S. Kahn, MD
Amy J. Park, MD
Megan N. Wasson, DO

Jeffrey Mangel, MD
Amanda M. Sadecky, MD
Ladin Yurteri-Kaplan, MD, MS

Joseph (Jay) L. Hudgens, MD
Steven E. Schraffordt Koops, MD, PhD
Megan N. Wasson, DO

Michael J. Kennelly, MD
Valerie To, MDCM
Xiaodan Zhang, MD
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**

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

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

Evidence to Justify Retention of Transvaginal Mesh: Comparison Between Laparoscopic Sacrocolpopexy and Transvaginal Elevate Mesh Series
V. To ............................................................................................................................................................ 4

Superior to the Traditional Treatment, Individual Biofeedback Combined with Electrostimulation Fits Type II Pelvic Floor Muscle Injury Best and Contributes to Sexual Satisfaction
X. Zhang ........................................................................................................................................................ 5

Robot-Assisted Sacrocolporectopexy for Multi-Compartment Prolapse of the Pelvic Floor: A Prospective Cohort Study Evaluating Functional and Sexual Outcome
S.E. Schraffordt Koops ................................................................................................................................ 11

Morcellation of Occult Uterine Malignancy at Time of Vaginal Hysterectomy
M.N. Wasson .............................................................................................................................................. 14

Video: Laparoscopic Vesicovaginal Fistula Repair with Innovative Vaginoscopy
M.J. Kennelly .............................................................................................................................................. 17

Video: Laparoscopic Uterosacral Vault Suspension
J.L. Hudgens .............................................................................................................................................. 18

Cultural and Linguistics Competency ........................................................................................................ 19
Plenary 5: Urogynecology

Moderator: Jim W. Ross
Co-Moderator: Robert S. Furr

Discussants: Bruce S. Kahn, Jeffrey Mangel, Amy J. Park, Amanda M. Sadecky, Megan N. Wasson, Ladin Yurteri-Kaplan

Faculty: Joseph (Jay) L. Hudgens, Michael J. Kennelly, Steven E. Schraffordt Koops, Valerie To, Megan N. Wasson, Xiaodan Zhang

This session provides a range of minimally invasive surgical techniques in the management of different pelvic floor diseases.

Learning Objectives: At the conclusion of this course, the participant will be able to: 1) Assess different minimally invasive surgical techniques to safely treat several pelvic floor conditions.

Course Outline

11:00 Evidence to Justify Retention of Transvaginal Mesh: Comparison Between Laparoscopic Sacrocolpopexy and Transvaginal Elevate Mesh Series

11:06 Discussant

11:10 Superior to the Traditional Treatment, Individual Biofeedback Combined with Electrostimulation Fits Type II Pelvic Floor Muscle Injury Best and Contributes to Sexual Satisfaction

11:16 Discussant

11:20 Robot-Assisted Sacrocolporectopexy for Multi-Compartment Prolapse of the Pelvic Floor: A Prospective Cohort Study Evaluating Functional and Sexual Outcome

11:26 Discussant

11:30 Morcellation of Occult Uterine Malignancy at Time of Vaginal Hysterectomy

11:36 Discussant

11:40 Video: Laparoscopic Vesicovaginal Fistula Repair with Innovative Vaginoscopy

11:46 Discussant

11:50 Video: Laparoscopic Uterosacral Vault Suspension

11:56 Discussant

12:00 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).
Art Arellano, Professional Education Manager, AAGL*
R. Edward Betcher*
Amber Bradshaw
Speakers Bureau: Myriad Genetics Lab
Other: Proctor: Intuitive Surgical
Sarah L. Cohen
Consultant: Olympus
Erica Dun*
Joseph (Jay) L. Hudgens
Contracted Research: Gynesonics
Frank D. Loffer, Medical Director, AAGL*
Suketu Mansuria
Speakers Bureau: Covidien
Linda Michaels, Executive Director, AAGL*
Karen C. Wang*
Johnny Yi*

SCIENTIFIC PROGRAM COMMITTEE
Sawsan As-Sanie
Consultant: Myriad Genetics Lab
Jubilee Brown*
Aarathi Cholkeri-Singh
Consultant: Smith & Nephew Endoscopy
Speakers Bureau: Bayer Healthcare Corp., DySIS Medical, Hologic
Other: Advisory Board: Bayer Healthcare Corp., Hologic
Jon I. Einarsson*
Suketu Mansuria
Speakers Bureau: Covidien
Andrew I. Sokol*
Kevin J.E. Stepp
Consultant: CONMED Corporation, Teleflex
Stock Ownership: Titan Medical
Karen C. Wang*

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).
Robert S. Furr
Speakers Bureau: Orexigen Therapeutics, Shionogi Inc., Upsher-Smith Laboratories
Other: Proctor: Intuitive Surgical
Joseph (Jay) L. Hudgens
Contracted Research: Gynesonics
Bruce S. Kahn
Contracted Research: AbbVie, Boston Scientific Corp., Inc., Urigen Pharmaceuticals
Michael J. Kennelly
Consultant: Allergan, Boston Scientific Corp. Inc., Coloplast
Contracted Research: Allergan, Amphora Medical, Astellas, Cook Myosite, Dignify Therapeutics, Novabay
Jeffrey Mangel*
Amy J. Park*
Jim W. Ross*
Amanda M. Sadecky
Consultant: Karl Storz
Steven E. Schraffordt Koops
Other: Proctor: Intuitive Surgical
Valerie To*
Megan Wasson*
Ladin Yurteri-Kaplan*
Xiaodan Zhang*
Content Reviewer has no relationships.

Asterisk (*) denotes no financial relationships to disclose.
Evidence to Justify Retention of Transvaginal Mesh: Comparison Between Laparoscopic Sacral Colpopexy and Transvaginal Elevate™ Mesh Series

Presenter: Valerie To, MDCM, FRCSC
Centre for Advanced Reproductive Endosurgery
Sydney, Australia

Disclosure
• I have no financial relationships to disclose.

Objective
• To discuss and inform patients about the pros and cons of vaginal mesh versus laparoscopic sacral colpopexy.

Background
• Sacral colpopexy:
  – FDA notification 2011
    – Transvaginal mesh-related complications are not rare.
    – Mesh placed abdominally results in lower mesh-related complications.
• Elevate™
  – Lighter mesh, single incision trocarless
  – Level I and II support

Methods
• Retrospective study

Demographics

<table>
<thead>
<tr>
<th></th>
<th>LSC(n=267)</th>
<th>Elevate™/SSLF (n=146)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean (SD)</td>
<td>59 (11)</td>
<td>63 (11)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>BMI, mean (SD)</td>
<td>25.7 (4.5)</td>
<td>26.3 (5.5)</td>
<td>NS</td>
</tr>
<tr>
<td>Parity</td>
<td>2.6 (1.2)</td>
<td>2.7 (1.3)</td>
<td>NS</td>
</tr>
<tr>
<td>Menopause, n(%)</td>
<td>185 (79.7)</td>
<td>120 (89.0)</td>
<td>.02</td>
</tr>
<tr>
<td>Previous hysterectomy, n(%)</td>
<td>158 (59.2)</td>
<td>35 (24.0)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Previous prolapse surgery, n(%)</td>
<td>143 (53.6)</td>
<td>29 (20.0)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Previous incontinence surgery, n(%)</td>
<td>51 (19.1)</td>
<td>13 (8.8)</td>
<td>.01</td>
</tr>
</tbody>
</table>
Dyspareunia
Vaginal/buttock
De
De
Wound cellulitis
UTI
Urinary
Fever
Hematoma/bleeding
Concomitant
EBL
Operative
Bowel
Bladder
3. Moore
2. U.S.
1. Maher
- Anti
Vaginal
Hysterectomy, n
Objective
Mesh
novo
novo
Overall
0.0
0.0
0.1
0.2
0.5
1.5
4.0
11.0
Mesh erosion
0.26
[0.00, 2.00]
[0.03, 2.10]
Objective cure
0.47
[0.28, 2.71]
Overall recurrence
1.07
[0.41, 2.76]
Outcomes (1 year)

• Findings suggest TV mesh safe, effective
• Low mesh erosion, comparable to LSC
• Limitations
  – Single centre & surgeon
  – Retrospective
  – Heterogeneous groups
  – Reporting bias
• Strengths
  – Large number, single centre
  – Thorough follow-up

Discussion

References

Conclusion

• Transvaginal Elevate™ mesh results in similar erosion rate than laparoscopic sacral colpopexy, while offering comparable apical support.
• Transvaginal mesh should remain an option for surgical treatment of pelvic organ prolapse.
Acknowledgements

Pattaya Hengrasmee, MD
Anna Lawless, B Sc, MPH
Justin Lam
Alan Lam, MBBS, FRANZCOG, FRCOG
Superior to the traditional treatment, individual biofeedback combined with electrostimulation fits type II pelvic floor muscle injury best and contributes to sexual satisfaction.

Presenting Author: Xiaodan Zhang, MD, PhD
Institution: Obstetrics and Gynecology Hospital of Fudan University
City/Country: Shanghai, China

Objectives

1. To compare the efficacy of different treatments for PFD.
   (Kegel exercise vs Vaginal cone vs biofeedback electrical stimulation)
2. To compare the efficacy between individual and traditional biofeedback electrical stimulation therapy.
   (PFM strength, pelvic organ prolapse and sexual life)

1. What are the commonly used treatments for pelvic floor dysfunction?
2. What are the advantages and disadvantages of biofeedback electrical stimulation?
3. The comparison of traditional and individual biofeedback electrical stimulation.

Background

Risk factors: Pregnancy and vaginal delivery
Consequences: Pelvic Organ Prolapse (POP), Stress Urinary incontinence (SUI), Impairment of Sexual Function, etc.
Treatments: Kegel exercise
Using Vaginal Cone
Biofeedback Combined with Electrostimulation

PFD (pelvic floor dysfunction)
PFM (pelvic floor Muscle)
**Background**

### A Kegel exercise:
- A PFM exercise first described in 1948 by Kegel.
- **Advantages:** No charges and convenient.

### 2 Weighted Vaginal Cone:
- A tool initially proposed by Plevnik in 1985.
- Choose cones with most suitable weight.

### 3 Biofeedback Combined with Electrostimulation:
- Be performed with intravaginal, anal and superficial electrodes.
- **Advantages:** High effectiveness
- **Disadvantages:** Charge, Discomfort, the need to sterilize the electrode and vaginal and urinary infection.

---

**Method**

### 1. Participants

**Inclusion Criteria:**
- Primipara
- <35 y
- vaginal delivery at term (37–40 weeks)
- 2012.08 – 2014.12

This is a multicenter prospective randomized controlled study and was approved by the Ethics Committee of the Obstetrics and Gynecology Hospital of Fudan University. All patients signed informed consent before participating in this research. The researchers included doctors, nurses and physical therapists.

**Exclusion Criteria:**
- previous pelvic impairment like surgeries,
- recurrent urinary tract infections,
- known malformations of urinary tract,
- diabetes, connective tissue disorders, neurological or cardiological diseases,
- pre-pregnancy incontinence.

### 2. Study dysign

### 3. Treatment

- Traditional biofeedback electrical stimulation:
  - (Frequency: 8–32 Hz, pulse duration: 320–740 μs)
- Individual biofeedback electrical stimulation:
  - Type I PFM injury only, 20-740Hz, larg.imp.500μs, R = T, 3-33mm.
  - Type II PFM injury only, 160-320 Hz, larg.imp.200 μs, R = 2 T, 40-80mm.
  - Type I+II mixed PFM injury, 50-320 Hz, larg.imp.500μs, R = T/R = 2 T, 20 to 50mm.

### 3. Assessment

- Score: Digital palpation (20%) + EMS (80%)
- Graded according to GIRRUG of ANAES
- POP-Q
- Pelvic Organ Prolapse/Urinary Incontinence Sexual Function Questionnaire-12 (PISQ-12) [8]

6 weeks postpartum (before treatment)
3 months postpartum (after treatment)
9 months postpartum (6 months after treatment)

3 times of assessment were done totally
Results

1.1 Comparison of PFM strength in different groups

![Graph showing comparison of PFM strength before and after treatment in different groups.]

Results

1.2 Comparison of sexual life in different groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Before treatment Mean ± S.D.</th>
<th>After treatment Mean ± S.D.</th>
<th>6 months after treatment Mean ± S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>30.8±9.58</td>
<td>32.5±6.69</td>
<td>34.3±7.65</td>
</tr>
<tr>
<td>B</td>
<td>29.9±7.65</td>
<td>31.6±5.14</td>
<td>35.5±6.28</td>
</tr>
<tr>
<td>C</td>
<td>31.0±8.12</td>
<td>33.0±6.11</td>
<td>34.5±5.69</td>
</tr>
<tr>
<td>D</td>
<td>30.3±6.37</td>
<td>38.1±6.63</td>
<td>40.3±10.32</td>
</tr>
</tbody>
</table>

Table 4: The PFSSQ-12 score before after and 6 months after the treatment.

Results

2.1 Comparison of PFM strength between individual and traditional groups

<table>
<thead>
<tr>
<th>Type of PFMD injury</th>
<th>Treatment</th>
<th>Before treatment Mean ± S.D.</th>
<th>After treatment Mean ± S.D.</th>
<th>6 months after treatment Mean ± S.D.</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I PFMD injury</td>
<td>Individual</td>
<td>3.16±3.36</td>
<td>3.82±0.32</td>
<td>3.46±0.87</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>3.14±3.77</td>
<td>3.32±0.10</td>
<td>3.04±0.59</td>
<td></td>
</tr>
<tr>
<td>Type II PFMD injury</td>
<td>Individual</td>
<td>2.85±2.53</td>
<td>2.77±0.98</td>
<td>3.04±0.31</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>3.26±3.35</td>
<td>3.26±3.10</td>
<td>3.26±3.51</td>
<td></td>
</tr>
<tr>
<td>Type I–II mixed PFMD injury</td>
<td>Individual</td>
<td>2.42±2.36</td>
<td>3.70±6.71</td>
<td>3.70±6.49</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>3.46±3.58</td>
<td>3.46±3.58</td>
<td>3.46±3.58</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Comparison of PFM strength between individual and traditional groups.

Results

2.2 Comparison of sexual life between individual and traditional groups

<table>
<thead>
<tr>
<th>Type of PFMD injury</th>
<th>Treatment</th>
<th>Before treatment Mean ± S.D.</th>
<th>After treatment Mean ± S.D.</th>
<th>6 months after treatment Mean ± S.D.</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I PFMD injury</td>
<td>Individual</td>
<td>31.0±8.12</td>
<td>32.3±6.13</td>
<td>32.5±6.23</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>36.4±4.23</td>
<td>32.1±6.31</td>
<td>31.5±6.09</td>
<td></td>
</tr>
<tr>
<td>Type II PFMD injury</td>
<td>Individual</td>
<td>36.8±4.46</td>
<td>47.5±4.13</td>
<td>47.3±4.13</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>38.9±4.27</td>
<td>31.0±4.31</td>
<td>31.7±4.04</td>
<td></td>
</tr>
<tr>
<td>Type I–II mixed PFMD injury</td>
<td>Individual</td>
<td>36.3±4.2</td>
<td>47.3±4.21</td>
<td>48.5±4.24</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Traditional</td>
<td>36.0±4.28</td>
<td>30.9±4.28</td>
<td>32.0±4.26</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Comparison of sexual life between individual and traditional groups.

Results

2.3 Comparison of D-values between individual and traditional groups

![Graph showing comparison of D-values before and after treatment in different groups.]

Conclusion

- Biofeedback electrical stimulation has some advantages on improving the pelvic floor muscles strength and quality of sexual life.

- It is of great importance for women with PFD, especially with type II PFM injury to receive individual biofeedback electrical stimulation treatment in order to promote PFM rehabilitation better.
Acknowledgements:

We are grateful to Zhiqi Li (Shanghai Changning Maternity and Infant Health Hospital), Yungui Cao (Shanghai Jiading Maternal and Child Health Care Hospital), Fang Cheng (Huaian Maternal and Child Health Care Hospital of Jiangsu Province) and Yanli Yun (Changzhou NO.7 People’s Hospital) that assisted in the investigation and data collection. We are also grateful to all participants.

References

Robot-Assisted Sacrocolporectopexy for Multi-Compartment Prolapse of the Pelvic Floor

Presenter: Dr. Steven E. Schraffordt Koops MD PhD, urogynecologist

Objectives
Assess:
• Safety and quality
• Anatomical outcomes (POP-Q)
• Urinary function after RASC (UDI-6)
• Sexual function after RASC (PISQ-12)

Disclosures
Other: Proctor: Intuitive Surgical
Methods

- All patients undergoing RASC in a large teaching hospital between March 2011 - December 2012 → N = 166
- Standard RASC, using the da Vinci Si-HD®
- Suspension with prolene mesh
- Simplified POP-Q to describe anatomic results.
- Pre- and/or postoperative questionnaires on micturation, sexual function and quality of life
- Follow-up: 12 months

Patient demographics N = 166

<table>
<thead>
<tr>
<th>Mean age (range)</th>
<th>62.4 (36-85)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean BMI (range)</td>
<td>25.8 (17.9-38.3)</td>
</tr>
<tr>
<td>Mean parity (range)</td>
<td>2.8 (1-6)</td>
</tr>
</tbody>
</table>

History (%)

- Hysterectomy: 41.6
- Oophorectomy: 6.6
- Pelvic POP/incontinence surgery: 50.0
- Abdominal surgery: 62.0

Technique used (n)

- Laparoscopic (prior hysterectomy): 69
- Laparoscopic hysterectomy: 94
- Hysterectomy: 2

Concomitant surgery %

- Concomitant rectopexy %: 45.1
- Concomitant TVT-O %: 32.5
- Concomitant TVT-O %: 8.4

Total Mean blood loss, milliliters (range) 65 (0-1300)

Conversion % (n)

- Conversion % (n): 1.8 (3)

Intra-operative complications % (n)

- Intra-operative complications % (n): 4.2 (7)

Postoperative complications % (n)

- Postoperative complications % (n): 4.2 (7)

Chaim-Steiner Classification grade 1 62.7 (4)

Chaim-Steiner Classification grade 2 14.3 (1)

Chaim-Steiner Classification grade 3-5 0 (0)

Postoperative pain scores; VAS (range) 3 (0-7)

Concomitant TVT-O N = 14 8.4 %

Postoperative TVT-O N = 7 4.2%

Anatomical & micturation results

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Pre-operative mean</th>
<th>12 months mean</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPQ – A'</td>
<td>2.5</td>
<td>1.4</td>
<td>&lt;0.0005</td>
</tr>
<tr>
<td>POPQ – B</td>
<td>2.1</td>
<td>1.2</td>
<td>&lt;0.0005</td>
</tr>
<tr>
<td>POPQ – C</td>
<td>2.7</td>
<td>1.0</td>
<td>&lt;0.0005</td>
</tr>
<tr>
<td>POPQ – D</td>
<td>1.7</td>
<td>1.0</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Pre-operative mean</th>
<th>12 months mean</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDI-6 Total</td>
<td>4.9 (0-14)</td>
<td>2.3 (0-16)</td>
<td>&lt;0.0005</td>
</tr>
<tr>
<td>Subscale Irritative</td>
<td>1.9 (0-6)</td>
<td>0.8 (0-5)</td>
<td>&lt;0.0005</td>
</tr>
<tr>
<td>Subscale Stress</td>
<td>0.9 (0-3)</td>
<td>0.6 (0-3)</td>
<td>0.124</td>
</tr>
<tr>
<td>Obstructive/Discomfort</td>
<td>2.1 (0-6)</td>
<td>0.9 (0-4)</td>
<td>&lt;0.0005</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Pre-operative mean</th>
<th>12 months mean</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concomitant TVT-O</td>
<td>N = 14</td>
<td>8.4 %</td>
<td></td>
</tr>
<tr>
<td>Postoperative TVT-O</td>
<td>N = 7</td>
<td>4.2%</td>
<td></td>
</tr>
</tbody>
</table>

Quality of life and sexual function

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Pre-operative mean</th>
<th>12 months mean</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFIQ-7</td>
<td>86.7</td>
<td>24.5</td>
<td>0.01</td>
</tr>
<tr>
<td>PISQ-12 total</td>
<td>31.3</td>
<td>36.5</td>
<td>0.45</td>
</tr>
<tr>
<td>Sexual activity</td>
<td>60.5%</td>
<td>53.2%</td>
<td>0.85</td>
</tr>
<tr>
<td>Dyspareunia</td>
<td>52.3%</td>
<td>33.8%</td>
<td>0.70</td>
</tr>
</tbody>
</table>

References

- Lane FL. Repair or posthysterectomy vaginal vault prolapse. Obstet & Gynecol 1962; 20: 72-77
- Yohannes et al. Comparison of robotic versus laparoscopic skills: is there a difference in the learning curve? Urology, july 2002
- Swift S et al. Validation of a simplified technique for using the POPQ pelvic organ prolapse classification system. Int Urogynecol J Pelvic Floor Dysfunct. 2006 Dec;17(8):815-20
- Uitto M et al. Validation of the Urogenital Distress Inventory (UDI-6) and Incontinence Impact Questionnaire (IIQ-7) in a Dutch population. Neurourol Urodyn. 2013 Jan;32(1):24–31

Conclusions

- Largest cohort reporting on RASC
- POP-Q results improves significantly for all anatomic landmarks
- UDI-6 total scores improved significantly
- Positive effect on quality of life
- Decrease in dyspareunia postoperatively
- Low erosion rate with the robotic approach after 1 year, do not perform concomitant hysterectomy
- Longer follow-up results are needed...
Acknowledgements

Egbert Lenters MD, gynecologist
Barry O’Reilly, MD PhD, urogynecologist
Femke van Zanten, MD
Morcellation of Occult Uterine Malignancy at Time of Vaginal Hysterectomy

Megan Wasson, DO
Department of Gynecologic Surgery
Mayo Clinic Arizona

Disclosures
• I have no financial relationships to disclose.

Objective
• Report the incidence of occult malignancy at the time of vaginal hysterectomy with morcellation
• Determine prognostic impact of uncontained vaginal morcellation

Introduction
• 2014 AAGL Practice Report¹
  • Caution and avoidance of morcellation
  • Patients with premalignant conditions
  • Patients with malignant conditions
  • Patients at risk for malignancy

Introduction
• Tumor Morcellation²
  • Increased rate of abdomino-pelvic dissemination
  • Peritoneal sarcomatosis
  • Vaginal apex recurrence
  • Decreased disease-free survival
  • Decreased overall survival

Morcellation During Vaginal Hysterectomy
• Limited data regarding dissemination of disease
  • Specifically with uncontained vaginal morcellation
• Unclear if vaginal and electromechanical morcellation carry same inherent risk

Introduction
• Tumor Morcellation²
  • Increased rate of abdomino-pelvic dissemination
  • Peritoneal sarcomatosis
  • Vaginal apex recurrence
  • Decreased disease-free survival
  • Decreased overall survival

Morcellation During Vaginal Hysterectomy
• Limited data regarding dissemination of disease
  • Specifically with uncontained vaginal morcellation
• Unclear if vaginal and electromechanical morcellation carry same inherent risk
Materials and Methods
- Retrospective cohort study
- IRB approved
- Inclusion criteria
  - All women undergoing total vaginal hysterectomy
- Primary outcome
  - Incidence of occult malignancy following morcellation
- Secondary outcomes
  - Perioperative data

Results
- Total Vaginal Hysterectomy (n=2296)
  - Intact uterine removal (n=1685, 73.39%)
  - Uterine removal utilizing morcellation (n=611, 26.61%)

Morcellation Cohort
- Occult uterine malignancy (n=5, 0.82%)
  - Stage IA, grade I endometrial adenocarcinoma (n=3, 0.49%)
  - Low grade stromal sarcoma (n=2, 0.33%)

Demographic and Preoperative Data
- Mean age 48.8 years
- Mean BMI 32.36 kg/m²
- Median parity 2
- Caucasian n=5 (100%)
- Menopausal n=4 (80%)
- Abnormal uterine bleeding n=5 (100%)

Final Pathology and Treatment
- Mean uterine weight 231.60 g
- Ovarian preservation n=3 (60%)
- Pelvic lymphadenectomy n=2 (40%)
- Vaginal brachytherapy n=1 (20%)
Patient Outcomes

- No evidence of disease recurrence or death
  - N=5, 100%
- Mean disease free survival
  - Endometrial adenocarcinoma 43.33 months (28-62 months)
  - Low grade stromal sarcoma 37.00 months (14-60 months)

Final Conclusion

- Incidence of occult uterine carcinoma 0.82% among patients undergoing vaginal hysterectomy with morcellation
- Does not appear to negatively impact patient prognosis

Further Research

- Vaginal morcellation and dissemination of disease
  - Benign
    - Iatrogenic peritoneal leiomyomatosis
    - Endometriosis

References


Acknowledgements

Paul Magtibay, MD
Javier Magnina, MD

Questions
Laparoscopic Vesicovaginal Fistula Repair with Innovative Vaginoscopy

Presenter: Michael J. Kennelly, MD
Women's Center for Pelvic Health, Charlotte, North Carolina

Objective: Illustration of an innovative technique for vaginoscopy and cystoscopy for fistula tract identification using a ureteral catheter to facilitate laparoscopic repair.

Design: Step-by-step explanation of the technique using videos and pictures (educative video).

Setting: Vesicovaginal fistulas are a rare complication in women. While the majority of these fistulas may be surgically treated with a vaginal approach, sometimes an abdominal or laparoscopic approach may be necessary. Vaginoscopy can be helpful in identifying the fistula. However, in many cases, distention of the vagina can be difficult. We illustrate an innovative vaginoscopy technique using a SILS Port to allow easy identification and placement of a ureteral catheter through the fistula tract.

Interventions: Laparoscopic vesicovaginal fistula repair with fistula cannulization via vaginoscopy.

Conclusion: In cases where a vesicovaginal fistula tract is small or difficult to identify, the tract may be cannulated with the aid of a vaginoscopy. Using a SILS port to achieve adequate distention facilitates vaginoscopy. Placing a ureteral catheter through the fistula tract helps minimize dissection and trauma to the bladder during the fistula repair.
Laparoscopic Uterosacral Ligament Suspension

Presenter: Joseph L. Hudgens, MD
Wiser Women’s Hospital, University of Mississippi Medical Center, Jackson, Mississippi

Objective: To present a technique for laparoscopic uterosacral ligament vault suspension.

Design: Educational video with stepwise demonstration of a technique for laparoscopic uterosacral vaginal vault suspension at the time of hysterectomy with narration.

Setting: Incomplete uterovaginal prolapse is a common condition that can be encountered when treating patients with other gynecologic conditions that require surgical intervention. Vaginal hysterectomy with suspension remains the preferred approach to hysterectomy when feasible, however a laparoscopic approach may be warranted for some patients. This case demonstrates a laparoscopic approach to uterosacral vault suspension in a patient undergoing a total laparoscopic hysterectomy for AUB-A, dysmenorrhea, and incomplete uterovaginal prolapse.

Interventions: Laparoscopic uterosacral vault suspension after total laparoscopic approach is presented in a stepwise fashion highlighting the following key elements:

1. Performing a relaxing peritoneal incision between the ureter and uterosacral ligament with a monopolar hook. This step is performed prior to the hysterectomy.
2. Tagging the uterosacral ligament at the level of the desired suspension with demonstration of an intra-corporeal knot tying technique. This aids in the identification of the uterosacral ligament and placement of the permanent suture.
3. Dissection of the vesicovaginal space after the hysterectomy and vaginal cuff closure have been performed.
4. Placement of the permanent suspension suture with incorporation of the anterior pubocervical fascia, posterior pubocervical fascia, and uterosacral ligaments.
5. Demonstration of suturing in both the vertical and horizontal planes.
6. Demonstration of a “cinch” knot tying technique to approximate tissue under tension.

Conclusion: A laparoscopic approach can be utilized when performing uterosacral vault suspension in patients that are undergoing laparoscopic hysterectomy. Performing a relaxing peritoneal incision between the uterosacral ligament and ureter may help decrease the incidence of ureteral kinking at the time of uterosacral vault suspension. Tagging the uterosacral ligament with a suture prior to the hysterectomy aids in identification of the uterosacral ligament and placement of the permanent suture.
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.