GLOBAL CONGRESS ON MIGS

AGL 2021

SYLLABUS

603-HYST:
Laparoscopic Hysterectomy from Basic to Complex
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
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603-HYST: Laparoscopic Hysterectomy from Basic to Complex

COURSE CO-CHAIRS: Sven Becker and Nutan Jain

FACULTY: Jose De Los Rios, Suketu Mansuria, Mariona Rius

In this session, we tackle the most common problems of the difficult laparoscopic hysterectomy. It is our most common surgery and while easy many times, it can be quite challenging. We offer a practical, down-to-earth analysis of the key difficulties and discuss pragmatic solutions every laparoscopic surgeon should know. Essential for the beginner, educational for the experienced surgeon.

Learning Objectives: At the conclusion of this course, the participants will be able to: 1) Describe key aspects of the laparoscopic hysterectomy; 2) demonstrate essential management strategies for typical difficult situations; and 3) discuss how to be more competent in the management of the challenging laparoscopic hysterectomy.

COURSE OUTLINE

7:00 am  Welcome, Introduction and Course Overview

7:05 am  How to Avoid in Difficult Hysterectomies  S. Becker

7:30 am  What the Cuff? (detailed talk about management of vaginal cuff during HLT and its complications)  J. De Los Rios

7:55 am  Managing the Scarred Bladder Flap and Obliterated Posterior Cul-de-sac  S. Mansuria

8:20 am  Salpingectomy, Always?  M. Rius

8:45 am  Tackling Bowel and Bladder Adhesions in TLH  N. Jain

9:10 am  Questions & Answers

9:30 am  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).
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Asterisk (*) denotes no financial relationships to disclose.
All relevant financial relationships noted have been mitigated.

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).
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Consultant/Speakers Bureau: Olympus, Storz, Hologic, Medtronic
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Speakers Bureau: Johnson & Johnson Suketu
Nutan Jain, MD*
M. Mansuria, MD
Speakers Bureau: Medtronic, Olympus
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Content Reviewers have nothing to disclose.
Asterisk (*) denotes no financial relationships to disclose.
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Education Partner and Fellowship Funding: Covidien
Speakers Bureau: Covidien
How to Avoid Complications in Difficult Hysterectomies
Sven Becker, MD, PhD
Director
Frankfurt University Women’s Hospital

Disclosure
Consultancies/Speakers Bureau: Olympus, Storz, Hologic, Medtronic

Objectives
● To share what I have learned over the course of 20 years of surgery
● To bring home key points that can help you in critical situations

What NOT do to – the WORST mistakes

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

- Make sure the Patient cannot slide cephalad
- Make sure the arms are tucked

2) Not using 20 mmHg when needed

CO2-Pressure – Train your Anesthesiologist
Use up to 20 mmHg whenever needed
PARTICULARLY AT INSERTION OF WORKING TROKARS

The Effect of Insufflation Pressure on CO2, Pneumoperitoneum and Embolism in Piglets

- Use CO2 pressure up to 20 mmHg whenever needed, particularly at the insertion of working trocars.

- CO2 pressure up to 20 mmHg is recommended for training anesthesiologists.
1) Positioning Mistakes
2) Not using 20 mmHg
3) Optical trocar too tangential
4) Optical trocar slides inward

Complications of wrong placement:
1) Skin incisions too big → trocars will slide in
2) Trocar placement too tangential → difficult movement
1) Positioning Mistakes
2) Not using 20 mmHg
3) Optical trocar too tangential
4) Optical trocar slides inward
5) Not using 30degree scope
1) Positioning Mistakes
2) Not using 20 mmHg
3) Optical trocar too tangential
4) Optical trocar slides inward
5) Not using 30-degree scope

There are Things you CANNOT do with a 0-degree Scope
There is NOTHING you cannot do with a 30-degree Scope

Position lateral additional Trocars high and lateral

Complications of wrong placement:
1) Lateral trocars too low
2) Lateral trocars too close to midline
3) Midline trocar in suprasymphysary position

Always go for THREE-TROCAR-SYSTEM (plus camera)
Advantages:
1) You will work away from you
2) An assistant will increase exposure - countertraction and safety
3) The assistant will be on the learning curve
4) You have equal access to both sides

Use a manipulator with a CAP
Place the manipulator yourself

Always have Uterus pushed in at maximum
Check Uterine manipulation frequently

1) Positioning Mistakes
2) Not using 20 mmHg
3) Optical trocar too tangential
4) Optical trocar slides inward
5) Not using 30degree scope
6) Lateral working trocars too low
7) Midline working trocars too low
8) No uterine manipulation
9) Uterus not pushed in sufficiently
10) Small bowel not removed from Douglas

Trendelenburg + Effort
Get that small bowel out there!
1) Positioning Mistakes
2) Not using 20 mmHg
3) Optical trocar too tangential
4) Optical trocar slides inward
5) Not using 30 degree scope
6) Lateral working trocars too low
7) Midline working trocars too low
8) No uterine manipulation
9) Uterus not pushed in sufficiently
10) Small bowel not removed from Douglas
11) Left colonic sidewall adhesions not taken down
12) Pelvic sidewall not opened to visualize ureter

Always take down Sigma-Attachments to lateral Psoas Space/pelvic sidewall

Always take down bladder anteriorly before coagulating uterine vessels

- will distance the Bladder AND the Ureters....
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) Positioning Mistakes
2) Not using 20 mmHg
3) Optical trocar too tangential
4) Optical trocar slides inward
5) Not using 30 degree scope
6) Lateral working trocars too low
7) Midline working trocars too low
8) No uterine manipulation
9) Uterus not pushed in sufficiently
10) Small bowel not removed from Douglas
11) Left colonic sidewall adhesions not taken down
12) Pelvic sidewall not opened to visualize ureter
13) Bladder not taken down
14) No Cap used on Manipulator

Use a manipulator with a CAP
Place the manipulator yourself
If you don’t get the basics straight — EVERY hysterectomy will be challenging

Things TO DO during a difficult hysterectomy

1. Use Palmer Point for big Uterus
2. 30-Degree-Scope MANDATORY
3. Use Manipulator to maximum effect
4. Get that bowel out of the pelvis
5. Make your Anesthesiologist work: Trendelenburg and 20 mmHg
6. Use Additional Supesymphysory Trocar for Uterine Lateralization (Open that Sidewall-Space)
7. Open Pelvic Sidewall for optimal anatomical perspective
8. Go slow: NO bleeding acceptable
9. Fight for that extra millimeter
10. The Manipulator is your most important instrument
11. Guide your assistants
12. Take down the Adnexae from the Uterus for extra mobility
13. Leave more difficult parts for last
14. Start on the easy side
15. Don’t compromise: Step-by-Step
16. Use Bladder-Fillings liberally
17. Know when to deflate bladder again
1. Use Palmer Point for big uterus
2. 30-Degree-Scope MANDATORY
3. Use Manipulator to maxium effect
4. Get that bowel out of the pelvis
5. Make your Anesthesiologist work: Trendelenburg and 20 mmHg
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12. Take down the Adnexae from the Uterus for extra mobility
13. Leave more difficult parts for last
14. Start on the easy side
15. Don’t compromise: Step-by-Step
16. Know when to deflate bladder again

If you can’t get to the Uterine arteries, don’t do the surgery laparoscopically
If you cannot do the colpotomy, don’t do the surgery laparoscopically

But: You can ALWAYS separate Uterus and Adnexae
This will give you extra mobility
Always decide after you have done that
Remember

Only if your easy surgeries are perfect
Will your difficult surgeries be safe

References

Atlas of Gynecologic Surgery

Thank you very much
sven.becker@kgu.de
WHAT THE CUFF?

JOSE DE LOS RIOS MD.
Chief of the Gynecological Endoscopy Unit
Clínica del Prado – Quirón.
Medellín, Colombia

Objectives

- Recognize the importance of the adequate intraoperative management of the vaginal cuff during total laparoscopic hysterectomy.
- Understand the magnitude of some problems related to the cuff and how to deal with them.
- Summarize some technical tips trying to prevent the more frequent complications.

Disclosure

- Speakers Bureau: Johnson & Johnson

My Beloved TEAM…

Why the Cuff?

| COMPLICATIONS IN TLH. CLINICA DEL PRADO – MEDELLIN - COLOMBIA. 2018-2020 |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|
| YEAR | 2018 | 2019 | 2020 | TOTAL |
| NUMBER OF LAPAROSCOPIC HYSTERECTOMIES | 1081 | 1325 | 1230 | 3636 |
| NUMBER OF TOTAL COMPLICATIONS (%) | 34 (3.1%) | 28 (2.1%) | 30 (2.4%) | 92 (2.5%) |
| NUMBER OF CUFF COMPLICATIONS (%) | 28 (82.3%) | 20 (71%) | 18 (60%) | 66 (1.81%) |
| CUFF ABSCESS | 4 (0.37%) | 1 (0.07%) | 3 (0.24%) | 8 (0.22% OF 3636 TLH) |
| CUFF DEHISCENCE | 3 (0.27%) | 10 (0.75%) | 2 (0.18%) | 15 (0.41%) |
| CUFF CELLULITIS | 17 (1.57%) | 6 (0.45%) | 11 (0.89%) | 34 (0.93%) |
| CUFF HEMATOMA | 4 (0.37%) | 3 (0.22%) | 2 (0.18%) | 9 (0.24%) |

COMPLICATIONS IN TLH 2018-2020 (N= 92 / 3636)
Cuff Hematoma


<table>
<thead>
<tr>
<th></th>
<th>TOTAL (N=204)</th>
<th>ABDOMINAL (N=104)</th>
<th>LAPAROSCOPIC (N=100)</th>
<th>P VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLUFF HEMATOMA NO</td>
<td>185 (90,7%)</td>
<td>90 (86,5%)</td>
<td>95 (95%)</td>
<td>0,0661 **</td>
</tr>
<tr>
<td>YES</td>
<td>19 (9,3%)</td>
<td>14 (13,5%)</td>
<td>5 (5%)</td>
<td></td>
</tr>
<tr>
<td>SYMPTOMATIC</td>
<td>2 (10,5%)</td>
<td>0</td>
<td>2 (40%)</td>
<td>0,04 **</td>
</tr>
<tr>
<td>ASYMPTOMATIC</td>
<td>17 (89%)</td>
<td>14 (100%)</td>
<td>3 (60%)</td>
<td>0,05 **</td>
</tr>
</tbody>
</table>

How can we prevent bleeding complications of the cuff?

• Adequate hemostasis.

• Adequate tension during suture process.

• Adequate and resistant knots.

• Adequate inclusion of the mucosa in the bites taken at the angles.
Cuff cellulitis and abscess

• Changes in Antibiotic Prophylaxis?

TABLE 2. ABSOLUTE FREQUENCY OF INFECTIOUS COMPLICATIONS (CUFF CELLULITIS AND CUFF ABSCESS) IN BOTH GROUPS.

<table>
<thead>
<tr>
<th></th>
<th>METRONIDAZOLE GROUP</th>
<th>PLACEBO GROUP</th>
<th>RR</th>
<th>P VALUE</th>
<th>CI 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CELLULITIS</td>
<td>2 (0.7%)</td>
<td>5 (1.7%)</td>
<td>1.75</td>
<td>0.261</td>
<td>(0.54 - 5.65)</td>
</tr>
<tr>
<td>ABSCESS</td>
<td>0 (0.0%)</td>
<td>2 (0.7%)</td>
<td>0.159</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How can we prevent infectious complications of the cuff?

• Adequate cut of the vagina

Cuff Dehiscence

CONCLUSION: Current evidence indicates that transvaginal colporraphy after total laparoscopic hysterectomy is associated with a 3- and 9-fold reduction in risk of vaginal cuff dehiscence compared with laparoscopic and robotic suture, respectively.

Cuff Dehiscence

Barbed Suture versus Conventional Suture for Vaginal Cuff Closure in Total Laparoscopic Hysterectomy: Randomized Controlled Clinical Trial

Claudia C. López, MD, José P. De Los Ríos, MD, Yurellie González, MD, Elsa María Vásquez-Trepalacios, MD, David Senti, MD, Adrain Arango, MD, Carolina García, MD, Ricardo Vásquez, MD, Juan B. Cortesde, MD, Luis A. Álvarez, MD, and Luis A. Jinésc, MD

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Polyglactin (n = 75)</th>
<th>Barbed suture (n = 75)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complications</td>
<td>6 (7.9)</td>
<td>7 (9.5)</td>
<td>.73</td>
</tr>
<tr>
<td>Hernia</td>
<td>0</td>
<td>2 (2.7)</td>
<td>.12</td>
</tr>
<tr>
<td>Cellulitis</td>
<td>4 (5.3)</td>
<td>4 (5.4)</td>
<td>.96</td>
</tr>
<tr>
<td>Abscess</td>
<td>1 (1.3)</td>
<td>0</td>
<td>.21</td>
</tr>
<tr>
<td>Dehiscence</td>
<td>1 (1.3)</td>
<td>1 (1.4)</td>
<td>.98</td>
</tr>
</tbody>
</table>

CONCLUSION: Transvaginal suturing appears to reduce the risk of vaginal dehiscence after total laparoscopic hysterectomy.

Vaginal Cuff Dehiscence in a Series of 12,398 Hysterectomies: Effect of Different Types of Colpotomy and Vaginal Closure

Julian Espe, MD, Marcela Gómez, MD, Anaclerio Cuaturi, MD, et al., Buenos Aires, Argentina, et al., 2012. Retrospective study

CONCLUSION: Transvaginal suturing appears to reduce the risk of vaginal dehiscence after total laparoscopic hysterectomy.
Laparoscopic vs transvaginal cuff closure after total laparoscopic hysterectomy: a randomized trial by the Italian Society of Gynecologic Endoscopy

Stefano Viarsca, MD, PhD, Marco Mascolo, MD, Stefano Sincos, MD, P. D. N. R., Renato Giarulli, MD, Giuseppe Chiaramonte, MD, Francesco Fontini, MD, Vittorio Bruni, MD, Stefano Mancini, MD, Roberto Bertelli, MD, Giovanni Cerreta, MD, P. D. N. R., Luca Capolongo, MD, Paolo Domenico, MD, Stefano De Lillo, MD, Roberto Pettinato, MD, Fabio Ghidoni, MD, Fabio Ghidoni, MD

2018
Planned sample: 2768
Stopped at 1408 because clear differences were obvious at the interim analysis.

CONCLUSION: Laparoscopic closure of the vaginal cuff at the end of total laparoscopic hysterectomy is associated with a significant reduction of vaginal dehiscence, any cuff complication, vaginal bleeding, vaginal cuff hematoma, postoperative infection, need for vaginal resuture, and reintervention.

DATA COMING FROM...

- CASE SERIES
- RCT
- Meta-Analysis
- Randomized Controlled Trial
- Case series - Multicenter
- Descriptive - Retrospective

---

How can we prevent dehiscences of the cuff?

- Adequate reconstruction of the layers.

---

Evidence Facts in vaginal cuff dehiscence

<table>
<thead>
<tr>
<th>EVALUATED FACT</th>
<th>CONCLUSION</th>
<th>LEVEL OF EVIDENCE</th>
<th>STRENGTH OF RECOMMENDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resumption of coital activity</td>
<td>Delayed resumption may prevent</td>
<td>5</td>
<td>LOW</td>
</tr>
<tr>
<td>Role of Training in suture</td>
<td>Adequate training is required</td>
<td>5</td>
<td>HIGH</td>
</tr>
<tr>
<td>Role of Electrosurgery</td>
<td>No evidence</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Double vs single layer closure</td>
<td>Double layer does not reduce risk</td>
<td>4</td>
<td>LOW</td>
</tr>
<tr>
<td>Vaginal vs Laparoscopic cuff closure</td>
<td>Laparoscopic closure reduces the risk</td>
<td>3a</td>
<td>HIGH</td>
</tr>
<tr>
<td>Role of barbed suture</td>
<td>Barbed suture reduce the risk [IN ROBOTIC HYSTERECTOMY, NOT IN LAPAROSCOPIC]</td>
<td>3p</td>
<td>LOW</td>
</tr>
</tbody>
</table>

---

Take home messages......

- Cuff complications have a fortunately low incidence, but account for the majority of the postoperative complications after total laparoscopic hysterectomy.
- Adequate training for laparoscopic closure is a keypoint to avoid cuff’s related problems.
- There are a lot of questions about this topic that still remain unsolved. There is a huge opportunity for research.
- And finally, believe me, It has been a real pleasure to share this lecture with all of you.
- THANKS A LOT !!!!!!
References


- De Los Ríos, JF; López, C; Villegas, J.D; Valencia, V; Cárdenas, L; Gallego D.E. Efficacy of the Use of Metronidazole After Laparoscopic Hysterectomy for the Prevention of Vaginal Cellulitis or Vaginal Cuff Abscess. Multicentric Triple-blind Randomized Controlled Trial. ClinicalTrials.gov Identifier: NCT03917134.


Managing The Scarred Bladder Flap And Obliterated Posterior Cul-De-Sac

Suketu Mansuria, M.D.
Associate Professor
University of Pittsburgh Medical Center

Objectives

• Review pelvic sidewall anatomy
  – Identify the uterine artery from its origin to facilitate difficult cases
• Discuss surgical strategies utilizing retroperitoneal anatomy to accomplish difficult hysterectomies
• Use a retroperitoneal approach to manage intraperitoneal pathology!!!

Pelvic Sidewall Anatomy

• Why is retroperitoneal anatomy important?
  – Important structures in the retroperitoneum:
    • Uterine artery-control of the uterine blood supply is 75% of a hysterectomy
    • Ureter-knowledge of its retroperitoneal course will minimize ureteral injury
  – Very rarely does pelvic pathology affect the retroperitoneal anatomy
    • Adhesions
    • Endometriosis
    • **Go from known to unknown!
  – Allows you to accomplish difficult cases
    • Scarred bladder flaps
    • Obliterated posterior cul-de-sac/endometriosis

Difficult Hysterectomies

• Securing the lower blood supply (ie. uterine arteries)
  – Securing the uterine artery at its origin off the hypogastric (internal iliac) can be helpful when dealing with a scarred bladder flap or obliterated cul-de-sac:
    • Sidewall anatomy often less distorted
    • Able to control the uterine blood supply when bowel or bladder is in close proximity to the traditional coagulation point
    • Once the uterus is devascularized, able to perform adhesiolysis with less bleeding (thereby improving visualization and decreasing the risk of bowel/bladder injury)
    • “Do the easy stuff first, and the hard stuff becomes easy!”

Disclosures

• I provide surgeon education for Medtronic and Olympus.
Pelvic Sidewall

- Two important structures in the pelvic sidewall/retroperitoneum
  - Ureter-ALWAYS found along the posterior leaf of the broad ligament
  - Uterine Artery-ALWAYS crosses above the ureter (water under the bridge)

Pelvic Sidewall

- Two Important Avascular Spaces
  - Pararectal space
  - Paravesical space
- Both spaces are triangles and share a common base – the uterine artery
- As long as you can identify one boundary of either space, you can develop both spaces and identify all the other boundaries

Pelvic Sidewall

- Three main surgical approaches to identifying the uterine artery from its origin off the hypogastric artery
  - Posterior approach
  - Lateral approach
  - Anterior approach
- Choice of approach will be determined by visualization and anatomy
Pelvic Sidewall

• Posterior Approach
  – Make a peritoneal incision between the IP ligament and the ureter (If there is difficulty identifying the ureter, start at the pelvic brim)
  – Extend the peritoneal incision from the pelvic brim towards the uterus-have your assistant pull the peritoneum medially
  – Develop the pararectal space
  – Identify all borders of the pararectal space and use them to identify the paravesicle space

• Lateral Approach—the approach most familiar to most gynecologist
  – Make a peritoneal incision from the round ligament parallel to the IP ligament
  – Have your assistant pull the peritoneal edge medially
  – Develop the pararectal space
  – Identify all borders of the pararectal space and use them to identify the paravesicle space

Pelvic Sidewall

• Anterior Approach-Used when the other two approaches are not possible (ie. obliterated cul-de-sac, very large and broad uterus)
  – The medial umbilical ligament is identified
  – The MUL is skeletonized and followed retrograde towards the uterine artery
    • Concentrate dissection on the medial side of the ligament (the paravesicle space will be developed)
    • Superior vesicle artery will be encountered before the uterine artery – SVA originates from the posterolateral aspect of the hypogastric artery and runs upwards to the bladder
  – Once the uterine artery identified, use it to identify all other structures

Obliterated Posterior Cul de Sac

• When an obliterated posterior cul de sac is encountered:
  – Devascularize the uterus (if performing a hyst)
  – Develop the rectovaginal space
    • Initiate the dissection in the perirectal space/Okabayashi Space
      – The space between the uterosacral ligament and the rectum
    • Identify the rectovaginal space below the obliteration
    • Go from “known” to “unknown”

Difficult Bladder Flap

• When a difficult bladder flap is encountered, the approach can be broken down into discrete steps:
  • Secure the blood supply
  • Complete the rest of the hysterectomy
  • Delineate borders of the bladder
  • Initiate dissection laterally and inferiorly
Difficult Bladder Flap

- Delineate the borders of the bladder
- Retrograde fill the bladder with 300-400cc
  - I use my suction-irrigator and connect it to the end of the foley and clamp the foley when the bladder is full
  - Once the borders are delineated, dissection can continue safely
- Often when the uterus is adherent to the anterior abdominal wall, the bladder is not involved (Dissect the uterus off the anterior abdominal wall with impunity!!)

Bladder Flap

- Initiate the dissection laterally and inferiorly
- Why?
  - The bladder is usually pulled up in the midline by scarring from previous cesarean sections
  - When dealing with scar tissue, it is important to find the proper plane for dissection=endopelvic fascia
  - By initiating the dissection inferiorly and laterally, the endopelvic fascia can more easily be identified
Thank You

Questions?

Evaluation Question
What two spaces should be developed to identify the uterine artery from its origin?
A. Presacral and retrorectal spaces
B. Pararectal and paravesicle spaces
C. Obturator and rectovaginal spaces
D. Pararectal and retrorectal spaces
E. Paravesicle and obturator spaces
SALPINGECTOMY, ALWAYS?

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Disclosure

"I have no financial relationships to disclose"

Objectives

- To understand the role of Fallopian tube in ovarian carcinogenesis
- To discuss the potential effects of opportunistic salpinguectomy (OS) in ovarian reserve
- To analyze the benefits of incorporating opportunistic salpingectomy in the daily practice

Background

- Epithelial ovarian cancer is the first cause of death from gynecologic malignancies
- 22,400 new ovarian cancers diagnosed in the US every year
- Unspecific symptoms, diagnosis at advanced stage with poor survival
- There are no effective means of screening

- High-grade serous ovarian cancer is the most common histologic type
- The fallopian tube is thought to be the site of origin
  - STIC: serous tubal intraepithelial carcinoma
• Hysterectomy is the second most common surgery among women.

• Uterine fibroids and abnormal uterine bleeding are the most common cause.

• 600,000 women undergo this procedure in US

Given the paradigm shift in the understanding of ovarian cancer pathophysiology, hysterectomy for benign indications is an opportunity for significant risk reduction.

OPPORTUNISTIC SALPINGECTOMY (OS): removal of the fallopian tubes for sterilization or at the time of hysterectomy for benign disease

- Risk of surgical complications
- Hospital readmission
- Longer hospital stay
- Surgical time

No differences in

But...

• ...impact on ovary reserve?
• ...early menopause onset?
• ...impact on ovarian cancer mortality and healthcare cost?
• ...easily adopted by gynecologists?
• 373 premenopausal women (30-45)
• Hysterectomy for benign condition (2016-2020)
• AMH, FSH, LH, AFC
  • Prior to surgery
  • 3 months after
  • 9 months after

• Single-blind randomized controlled trial
• 86 women
• Hysterectomy for benign condition (2017-2018)
• AMH prior to and 3 months after surgery

But...
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IF THE OS AFFECTS THE OVARIAN BLOOD SUPPLY, IT IS NOT SUBSTANTIAL ENOUGH TO RESULT IN EARLIER ONSET OF MENOPAUSE

But...
• …impact on ovary reserve?
• …early menopause onset?
• …impact on ovarian cancer mortality and healthcare cost?
• …easily adopted by gynecologists?
• Register-based retrospective case-control study
• Women with epithelial ovarian, Fallopian tube or peritoneal cancer (2008-2014)
• Ten controls per case
• Exposures: salpingectomy, hysterectomy and tubal ligation
• Cases 4,669 - controls 46,678

SALPINGECTOMY WAS ASSOCIATED WITH A REDUCED RISK OF OVARIAN CANCER (type 2)

• 8-State Markov state transition model
• Hysterectomy, tubal ligation and ovarian cancer
• Transition probabilities
• Used to predict ovarian cancer incidence
• Tested 2 strategies
• Transition probabilities for development of ovarian cancer considering tubal ligation and OS during hysterectomy was not performed.
• Transition probabilities based on assumption OS will be performed
• To model ovarian cancer mortality: annual mortality after developing would be 13% per year for 10 years

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Conclusions
• Research indicates a likely role of the fallopian tube in the development of ovarian cancer.
• Opportunistic salpingectomy is a safe procedure
• OS decrease the risk of developing ovarian cancer
• OS does not lead to an early menopause onset or detrimental effect on ovarian reserve

Conclusions
• Research indicates a likely role of the fallopian tube in the development of ovarian cancer.
• Opportunistic salpingectomy is a safe procedure
• OS decrease the risk of developing ovarian cancer
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WE SHOULD COUNSEL WOMEN ABOUT THE OPTION OF OPPORTUNISTIC SALPINGECTOMY

References


SALPINGECTOMY, ALWAYS?

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TACKLING BOWEL AND BLADDER ADHESIONS IN TLH

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Disclosure

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OBJECTIVES

• To discuss complex TLH with bladder and bowel adhesions
• Describe strategies to tackle bowel adhesions in TLH
• Elaborate various strategies to dissect the obstinately adherent bladder.
• Newer modalities to enhance ureteric safety in complex TLH.

INCIDENCE OF BLADDER INJURIES

• Bladder adhesions in previous caesarean section.
• Adhesions of uterus to anterior abdominal wall.
• Endometriosis.

DISSECTION OF ADHERENT BLADDER

• Filling the bladder with saline.
• Cystosufflation: Clamping of the bladder catheter with a Kelly’s clamp; Connecting the laparoscopic carbon-dioxide insufflation tube to the catheter.

IN CASES OF ADHERENT BLADDER

• Remove the catheter
• Insert a bougie in the bladder
• Show the highest limit of the bladder with the bougie and then do the sharp dissection on the UV fold
The lateral approach has been effective for bladder dissection and in avoiding bladder injuries in patients with previous cesarean sections.

- Incision in posterior leaf of broad ligament is extended until the uterosacral ligament exposing the Rumi cup.
- We start working from behind forwards, skeletonizing the uterine artery posteriorly.
- The bulk of uterine artery is held with harmonic and resected.
- Then the uterine artery pedicle is meticulously shaved off the manipulator cup.

This takes away the anterior part of Mackenrodt's ligament and exposes the plane of the bladder.

Even through the bladder remains adherent on top, we are able to negotiate the grasper beneath it.

Keeping snugly close to the cup, exposing the cotton candy space, the bladder is dissected off from the highest level of adherence, which is delineated by boogie in-situ.

Last look of the cup.
**TLH IN PREVIOUS LSCS CASES**

- Uterus stuck to the anterior abdominal wall like a "Stamp on an Envelope"

**UTERUS STUCK HIGH UP WITH BLADDER ADHERENT**

**COMPLEX TLH**

- When two, three or more factors coexist...TLH becomes more challenging.

**DIFFICULT BLADDER DISSECTION IN A CASE OF PFANNENSTIEL INCISIONAL HERNIA WITH PREVIOUS TWO CESAREAN SECTIONS**

**ADHESIOLYSIS COMPLETED & HERNIAL DEFECT EXPOSED**

**COMPLEX TLH WITH PREVIOUS 3 LSCS WITH BIG HERNIA**

- Obese-110kg
- Previous 3 LSCS
- H/O Rupture uterus in 3rd labour
- Ventral hernia
- Very big cervical myoma like 'Lantern on top' uterus
COMPLEX TLH WITH PREVIOUS 3 LSCS WITH BIG HERNIA

Video

WE DID IPOM PLUS PROCEDURE
Laparoscopic Intra-peritoneal Onlay Mesh (IPOM)

- A macro-porous, tissue-separating mesh that can be used in open and minimally invasive ventral hernia repairs.

HERNIA REPAIR

Video

EARLY AMBULATION

Video

URETERS

- Risk of ureteric injury as in distortion of pelvic anatomy
- In large fibroids, cervical and broad ligament myomas
- Severe endometriosis.

TO DELINEATE URETERS FOR ENHANCED SAFETY

- ENV (Endoscopic Near Infra vision camera systems)
- We inject ICG via ureteric catheters to illuminate the ureters fluorescent green.
Case of large rectovaginal nodule involving lower third of ureter, vagina, rectovaginal septum and bladder

RIGHT URETER

BIG NODULE

RV NODULE

EXCISING THE BLADDER NODULE

VAULT CLOSURE COMPLETED
We are seeing as a constant finding, the RUMI cup also colors green ……making colpotomy even more easier
BOWEL INJURIES CAN HAPPEN

- Entry related
- During adhesiolysis
- Complex situations
- Cautery/diathermy

MULTIPLE BOWEL LOOPS STUCK

JAIN POINT: TO AVOID BOWEL INJURIES DURING ENTRY

- Jain point lies in the left paraumbilical region, in a straight line drawn vertically upward from a point 2.5 cm medial to anterior superior iliac spine. It lies 10-13 cm lateral to the umbilicus.
- Basic aim is to avoid VVAAB: Vessels, Viscera, Adhesions and Bowel.

A CASE OF DIFFICULT LAPAROSCOPIC ENTRY

- Patient had a laparotomy at the age of 8, for intestinal obstruction, had bowel resection & anastomosis, there were multiple drain sites.
- Had a burst abdomen with re-suturing.
- Now needed laparoscopy for infertility evaluation - Entry made by Jain Point.
- At Palmer’s and Lee Huang point we are pressing with finger and found that there are bowel loops stuck beneath.
- Hasson technique is also not applicable as the incision is involving the umbilicus.
- As all three point are not applicable, we entered through Jain Point.

TLH WITH GROSS BOWEL ADHESIONS

Video
COMPLEX GYNAECOLOGICAL SITUATIONS

- Previous laparoscopy for very severe endometriosis.
- Severe dysmenorrhea.
- LSCS done 2yrs ago with transverse scar.
- Sustained bladder laceration during caesarean.
- Bowel densely stuck over the uterus.
- Cervix pulled up.
- Now back for hysterectomy for pain and irregular bleeding P/V.

TIPS AND TRICKS FOR BOWEL ADHESIOLYSIS

- Ideally, the initial trocar should be placed 5-10 cm away from the patient's previous scar.
- Adhesions to the abdominal wall should be taken down first.
- Identify the white line where the abdominal wall peritoneum meets the adhesions this facilitates dissection in a bloodless plane.

TLH ....WITH EXTENSIVE BOWEL ADHERIONS

- Previous one caesarean section.
- Presented with secondary infertility.
- We did laparoscopy for extensive endometriosis...she conceived !
- Underwent two more C/S at her place.
- Now presented with severe pain and menorrhagia for TLH.

IF BOWEL NOT ADEQUATELY PREPARED...

CATASTROPHIC SITUATION !

- For cases with faecal contamination, laparotomy with colostomy may be needed (So, always prepare bowel !!!)
PORT PLACEMENT FOR COMPLEX TLH

TAKE HOME MESSAGE

• Plan extensively before the surgery in difficult situations
• Mobilize and motivate your entire team to help you accomplish successful outcome in such difficult surgery.
• Use the subtle variations suggested in this talk to make surgery easier.
• With the modern gadgets available, especially various manipulators, vessel sealers and Harmonic ACE, the task of difficult TLH becomes much easier.

ACKNOWLEDGMENTS

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• Ebisawa K, Nagase T, Umemura K, Kanao H, Andou M. Separating the bladder from the uterus in TLH using the lateral approach in patients with previous cesarean sections, volume 19, issue 6, supplement, S125, November 01, 2012, DOI: https://doi.org/10.1016/j.jmig.2012.08.330
CULTURAL AND LINGUISTIC COMPETENCY

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.

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.