Extreme Laparoscopy: Expanding the Surgical Horizon (Didactic)

PROGRAM CHAIR
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Professional Education Information

**Target Audience**
Educational activities are developed to meet the needs of surgical gynecologists in practice and in training, as well as, other allied healthcare professionals in the field of gynecology.

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

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Surgery should never be unpredictable and surgeons are exposed to constraints that should be respected, understood and overcome. There is no place for uncertainty and that is why every single action that may reduce the amount of uncertainty is paramount in surgery. The surgical act is a succession and/or a series of basic actions. These basic actions do not require particularly complex skills but when put together they create sophisticated surgical actions. These surgical actions can be called “emergent” because they overcome the complexity of the original entity. It is relatively easy to reach an average level in any type of surgery, but if one wishes to expand his surgical horizon, he must understand that only surgical emergence is an art form as it is closely linked to the surgeon’s capacity, ability, intelligence, vision and willpower.

Laparoscopy has come to the point where anything seems possible in the hands of certain people. However, surgery cannot be guided by the surgeon’s ego and that is why improving one’s surgical skills is such an important issue. This course has been developed to demonstrate the knowledge required and the path to follow to become an “extreme” surgeon.

Learning Objectives

At the conclusion of this course, the participant will be able to: 1) Use the learning process to understand the power of endoscopic surgery; 2) master the theory of laparoscopic surgical rules; 3) identify the key steps of laparoscopic surgery; 4) recognize extreme situations; 5) explain the surgical basics required to face extreme situation; and 6) review the special training required to broaden your skills.

Course Outline

1:30 Welcome, Introductions and Course Overview  
A. Wattiez

1:35 What Does Extreme Laparoscopy Mean?  
A. Wattiez

2:00 Extreme Attitude Toward Organs  
S.P. Puntambekar

2:25 Extreme Dissection  
D.B. Redwine

2:50 Extreme Situation in Oncology  
C. Pomel

3:15 Questions & Answers  
All Faculty
3:25  Break

3:40  “Extreme” as a Philosophy  A. Wattiez

4:05  What Is Behind My Extreme Attitude?  S.P. Puntambekar

4:30  What Is Behind My Extreme Attitude?  D.B. Redwine


5:20  Questions & Answers  All Faculty

5:30  Course Evaluation
PLANNER DISCLOSURE
The following members of AAGL have been involved in the educational planning of this workshop and have no conflict of interest to disclose (in alphabetical order by last name).
Art Arellano, Professional Education Manager, AAGL*
Viviane F. Connor
Consultant: Conceptus Incorporated
Frank D. Loffer, Executive Vice President/Medical Director, AAGL*
Linda Michels, Executive Director, AAGL*
Jonathan Solnik
Other: Lecturer - Olympus, Lecturer - Karl Storz Endoscopy-America

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Grants/Research Support: Elsevier
Consultant: Bayer Healthcare Corp., Conceptus Incorporated, Ferring Pharmaceuticals
Speaker's Bureau: Bayer Healthcare Corp., Conceptus Incorporated, Ferring Pharm
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Speaker's Bureau: Covidien, Abbott Laboratories
Other: Proctor - Intuitive Surgical

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).
Arnaud Wattiez
Consultant: VECTEC, Karl Storz Germany
Christophe Pomel*
Shailesh P. Puntambekar*
David B. Redwine*
Stephanie N. Morris*
Asterisk (*) denotes no financial relationships to disclose.
EXEMPLARY LAPAROSCOPY
....what does it mean?

A. WATTIEZ

Disclosure

✓ Consultant Karl Storz GmbH
✓ Consultant Vectec

Objective

1. To present the philosophy of extreme laparoscopy from a different point of view.
2. To draw a parallel between extreme situations in surgery and other real situations in life.

Video

• Learning points of course & video:
  1. To properly understand the definition of extreme laparoscopy
  2. To recognize the extreme situations and review their management
  3. To understand the advantages & power of endoscopic surgery
  4. To master the theory of laparoscopic strategy & surgical rules
  5. To review the special training required to broaden your skills

Extreme laparoscopy

• Definition
• Management
• Training

Extreme laparoscopy

definition

.......a misunderstanding?
Management

Principles
- Understand
- Strategy & Rules
- Excellence
- Training

Are you aware of the power of the scope?

Strategy

“To apply certain sequences in a certain order with the goal to achieve a task”

We are what we repeatedly do. Excellence, therefore, is not an act, but a habit. (Aristotle)
Is that enough?

The Philosophy of Extreme

• think different!

Conclusions

• Extreme laparoscopy is a relative concept and its definition must not be misunderstood
• No matter the difficulty of the situation, surgery should never be unpredictable
• Mastering the principles of surgery & proper training are fundamental when dealing with extreme situations
• Technology cannot replace dissection as the pivot of surgery
• Training in laparoscopic surgery must be progressive & continuous
OBJECTIVES...

- To evaluate the feasibility of various types of laparoscopic exenterative surgeries in oncology.
- That laparoscopic exenterative surgeries can be achieved safely with comparable oncological results.
- Use of anatomical landmarks while performing these procedures.

INTRODUCTION...

- Exenteration is an established procedure for treatment of gynecological cancers.
- Since June 2003 till September 2012 - 92 patients underwent different types of pelvic exenterations at our institute - 82 patients underwent laparoscopic procedure while 10 were done Robotically.

DISTRIBUTION OF CANCER CASES

<table>
<thead>
<tr>
<th>Operation</th>
<th>AE</th>
<th>PE</th>
<th>TPE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laparoscopic</td>
<td>60</td>
<td>11</td>
<td>11</td>
<td>82</td>
</tr>
<tr>
<td>Robotic</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>11</td>
<td>12</td>
<td>92</td>
</tr>
</tbody>
</table>
**LAPAROSCOPIC ANTERIOR EXENTERATION**

- 60 women who underwent LAE at our institute between June 2003 and September 2012 were retrospectively analysed.

<table>
<thead>
<tr>
<th>TOTAL CASES 60</th>
<th>Primary surgery (n=25)</th>
<th>Secondary surgery post CT/RT (n=35)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cervix</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Ovary</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Vagina</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Uterus</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**PRESENT STUDY Lap. Anterior Exenteration (n=60)**

- Median surgical duration: 180 mins (160-200)
- Median blood loss: 220 ml
- Mean hospital stay: 6 days
- Intra op blood transfusion: 0
- Median followup: 30 months
- Immediate mortality: 0

**TYPES OF URINARY DIVERSIONS (LAPAROSCOPIC)**

<table>
<thead>
<tr>
<th>Types of Urinary Divisions</th>
<th>No of Patients (n=60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ureterosigmoidostomy</td>
<td>38</td>
</tr>
<tr>
<td>Mainz II</td>
<td>2</td>
</tr>
<tr>
<td>Ileal conduit</td>
<td>15</td>
</tr>
<tr>
<td>Indiana pouch</td>
<td>5</td>
</tr>
<tr>
<td>Neo-bladder</td>
<td>0</td>
</tr>
</tbody>
</table>

**LAPAROSCOPIC ANTERIOR EXENTERATION**

- Type of urinary diversion important
- Earlier diversions -ureterosigmoidostomy -has high complication rate.
- Since last few years -Ileal conduit and Indiana pouch.
- 2 cases with Mainz II.
Recurrence rate in Lap. Anterior Exenteration

- In our series, 33 patients of recurrence in 3 years.
- Out of these patients, 10 patients had primary surgery and 23 patients had surgery post CT/RT.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of patients with recurrence (n=33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary surgery</td>
<td>10</td>
</tr>
<tr>
<td>Secondary surgery(post CT/RT)</td>
<td>23</td>
</tr>
</tbody>
</table>

Recurrence rate in Lap. Anterior Exenteration

- Earliest recurrence seen 6 months following surgery.
- Patients who developed recurrence in 3 years, 80% had distant metastasis and 20% had local & distant disease.

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. of patients (n=33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distant recurrence</td>
<td>26 (80%)</td>
</tr>
<tr>
<td>Local and distant recurrence</td>
<td>7 (20%)</td>
</tr>
<tr>
<td>Lymph node involvement</td>
<td>33 (100%)</td>
</tr>
<tr>
<td>Surgical margins</td>
<td>3 (9%)</td>
</tr>
</tbody>
</table>

Recurrence rate in Lap. Anterior Exenteration

- All the patients with recurrence had nodal metastasis at the time of surgery.
- 3 of the patients with recurrence had surgical margins positive.
- 80% of patients were free of local symptoms post surgery.

Survival rate

- Survival solely dependant on:
  - negative nodal status
  - tumour free margins

<table>
<thead>
<tr>
<th>PRESENT STUDY (N=60)</th>
<th>No. of patients</th>
<th>Primary surgery</th>
<th>Secondary surgery</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 year survival rate</td>
<td>27</td>
<td>21</td>
<td>6</td>
<td>45%</td>
</tr>
<tr>
<td>5 year survival rate</td>
<td>15</td>
<td>9</td>
<td>6</td>
<td>25%</td>
</tr>
</tbody>
</table>

Survival rate of Lap. Anterior Exenteration

- 3-year survival- 27 patients
- disease free-21 patients
- Disease free survival after 3 years - 35%.

Conclusion

- All 6 patients with recurrent disease were having nodal involvement. Hence nodal status is important prognostic factor for survival.
- Survival is much better when primary surgery.
Conclusion

- 5-year survival - 25%
- Results comparable to our open cases, other world series.
- Majority having systemic recurrence rather than local.
- Quality of life post-surgery directly related to surgical expertise.

<table>
<thead>
<tr>
<th>Table: Laparoscopic Posterior Exenteration World Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author (Year)</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Packard et al. (2004)</td>
</tr>
<tr>
<td>Launois et al. (1997)</td>
</tr>
<tr>
<td>Ferguson et al. (2002)</td>
</tr>
<tr>
<td>Parwani et al. (2005)</td>
</tr>
<tr>
<td>Huang et al. (2004)</td>
</tr>
</tbody>
</table>

Hurdles perceived in feasibility of laparoscopy

- Multi organ involvement requiring extensive dissection
- Technical feasibility of a urinary diversion

LAPAROSCOPIC POSTERIOR EXENTERATION

- 11 patients who underwent LPE for advanced gynecological malignant disease studied.
- Laparoscopic surgery beneficial in carefully selected patients following R-0 resection.

OUR SERIES OF OPEN AE

Role of Anterior Exenteration in Advanced and Recurrent Pelvic Tumours

Laparoscopic Posterior Exenteration in Advanced Gynecologic Malignant Disease

Posterior exenteration
LAPAROSCOPIC POSTERIOR EXENTERATION

**Inclusion Criteria**
- Ovarian cancer involving the pouch of Douglas
- Post radiation cervical cancer recurrence localized posteriorly
- CA cervix with RVF
- CA vagina with rectal involvement

**Exclusion Criteria**
- Distant metastasis including paraaortic nodes
- Involvement of urinary bladder
- Involvement of ureters
- Limb oedema and sciatic pain
- Medically unfit

**Operative Data (our data 2010)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>54 yrs</td>
</tr>
<tr>
<td>Operative time</td>
<td>220 min</td>
</tr>
<tr>
<td>Blood loss</td>
<td>360 ml</td>
</tr>
<tr>
<td>Length of hospital stay</td>
<td>9 days</td>
</tr>
<tr>
<td>No of blood transfusion</td>
<td>1.3</td>
</tr>
<tr>
<td>Median follow-up</td>
<td>26 months</td>
</tr>
<tr>
<td>Lymph node yield in cervical and vaginal cancers</td>
<td>18</td>
</tr>
</tbody>
</table>

**Pathologic Characteristics of Cervical Carcinoma**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Primary surgery</th>
<th>Secondary surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of patients</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Tumor size, mean, cm</td>
<td>5.5</td>
<td>4</td>
</tr>
<tr>
<td>No. of nodes harvested, mean</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>No. of positive nodes, mean</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Margins positive</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Recurrence</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Major Morbidity after LPE 30%**

<table>
<thead>
<tr>
<th>Complication</th>
<th>No. of patients(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed bladder recovery</td>
<td>4(40)</td>
</tr>
<tr>
<td>Surgical site infection</td>
<td>1(10)</td>
</tr>
<tr>
<td>Anastomatic leak</td>
<td>1(10)</td>
</tr>
<tr>
<td>Pronged ileus</td>
<td>1(10)</td>
</tr>
</tbody>
</table>

**Complications (our data 2010)**

- Delayed bladder recovery: 4(40)
- Surgical site infection: 1(10)
- Anastomatic leak: 1(10)
- Pronged ileus: 1(10)

**References**
- Reference: The J of minimal invasive gynecology, 2010
CONCLUSION

- Disease free survival in LPE - 80%.
  - After median follow-up of 26 months -
  - 9 out of 11 patients were alive
  - 8 patients were free of disease
- Survival is much better in cancer cervix than in cancer ovary

POSTERIOR EXENTERATION - CONCLUSION

- Restoration of complete anatomy is possible.
- LPE has a good 5 year survival rate, but cases are few.
- Despite extensive experience in LRH and anterior and total pelvic exenteration, only 11 patients were eligible to undergo LPE during study.

TOTAL PELVIC EXENTERATION

- We have successfully performed laparoscopic TPE 11 cases
- In 1 patient - robotic TPE
- No patients required conversions to open surgery.
- Relief from local symptoms was dramatic and was documented in all patients.

LAPAROSCOPIC TPE

- Compared to a total of 600 cases of Lap radical hysterectomies, 10% were of LAE, 1.5% were of LPE, and 1% were of TPE.
- This is because of stringent criteria in selection of cases for exenteration procedure.

Lap. Total Pelvic Exenterations

Our series - 11 patients
- Median operative time 200 min.
- Average blood loss 400 ml
- Postop. hospital stay 6 days

6 patients have completed one year follow-up and are disease free.
Complications of Laparoscopic Exenteration

<table>
<thead>
<tr>
<th>Complications</th>
<th>No. of patients (n=81)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleeding</td>
<td>2</td>
</tr>
<tr>
<td>Ureteric injury</td>
<td>3</td>
</tr>
<tr>
<td>Intestinal leak</td>
<td>4</td>
</tr>
<tr>
<td>Wound infection</td>
<td>1</td>
</tr>
<tr>
<td>Prolonged ileus</td>
<td>8</td>
</tr>
</tbody>
</table>

Complications of Exenteration

- Bleeding
- Ureteric injury
- Intestinal leak
- Wound infection
- Prolonged ileus
- No major complication

Comparison of Our Operative Data

<table>
<thead>
<tr>
<th>PRESENT STUDY (n=81)</th>
<th>LAP. ANTERIOR EXENTERATION (N=40)</th>
<th>LAP. POSTERIOR EXENTERATION (N=11)</th>
<th>LAP. TOTAL EXENTERATION (N=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median surgical</td>
<td>180 mins (160-200)</td>
<td>220 mins (180-430)</td>
<td>230+/-15 mins</td>
</tr>
<tr>
<td>duration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median blood loss</td>
<td>220</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Mean hospital stay</td>
<td>6</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Intra op blood</td>
<td>0</td>
<td>1.3</td>
<td>5</td>
</tr>
<tr>
<td>transfusion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median follow up</td>
<td>30</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Immediate mortality</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Survival

- Survival rate in LPE is better as compared to LAE.
- Because of physiologically weaker cervicovesical fascia, cancerous cells tend to invade bladder more frequently compared to rectum.

Comparison of 5 year Survival Rates Of pelvic exenteration
Robotic Exenteration

- With the advent of da vinci robotic system, many surgeries that would have been done with an abdominal incision are now being performed with minimal invasive techniques using DRS.
- In our institute, since 2009 we performed 10 cases of pelvic exenteration with robotic approach.
- Recently we performed first robotic total pelvic exenteration, Our data shows...
- All patients who underwent robotic exenteration were underwent chemoradiations before surgery.
- We have only 3 year survival data of these patients, as we started using robot since 2009.

**Comparison of world Laparoscopic series**

<table>
<thead>
<tr>
<th>Author</th>
<th>No of pts</th>
<th>Surgical method</th>
<th>Mean time of procedure</th>
<th>Blood loss</th>
<th>Hospital stay</th>
<th>Follow-up</th>
<th>5 year Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferennscild</td>
<td>69</td>
<td>Open exenteration</td>
<td>448 mins</td>
<td>6300 ml</td>
<td>17 days</td>
<td></td>
<td>45%</td>
</tr>
<tr>
<td>Magion et al</td>
<td>106</td>
<td>Open exenteration</td>
<td>490 mins</td>
<td>1240 ml</td>
<td>21 days</td>
<td></td>
<td>52%</td>
</tr>
<tr>
<td>PRESENT STUDY</td>
<td>LAP.‐10</td>
<td>ROBOTIC ANTERIOR EXENTERATION</td>
<td>180 mins</td>
<td>200 ml</td>
<td>7 days</td>
<td>16 (5-64) months</td>
<td>60%</td>
</tr>
<tr>
<td>Present et al</td>
<td>LAP.‐5</td>
<td>Laparoscopy‐assisted pelvic exenteration: 6.5 hours</td>
<td>1 pts anterior</td>
<td>less than 500 ml</td>
<td>27 days</td>
<td>13 months</td>
<td>3 pts free of disease</td>
</tr>
<tr>
<td>Uzan et al</td>
<td>LAP.‐5</td>
<td>Laparoscopic Pelvic exenteration: 4.5 hours</td>
<td>1 pts posterior</td>
<td>less than 500 ml</td>
<td>3 pts died after 11 and 15 months</td>
<td>3 pts free of disease</td>
<td>2 pts growing metastasis</td>
</tr>
<tr>
<td>Ferron et al</td>
<td>LAP.‐5</td>
<td>Laparoscopy‐assisted pelvic exenteration: 6.5 hours</td>
<td>1 pts anterior</td>
<td>less than 500 ml</td>
<td>27 days</td>
<td>13 months</td>
<td>3 pts free of disease</td>
</tr>
</tbody>
</table>

**LAPAROSCOPIC ANTERIOR EXENTERATION**

**LAPAROSCOPIC POSTERIOR EXENTERATION**

**Laparoscopic Total Exenteration**
Summary

- Exenteration is supposedly a very extensive procedure but it has a definite role in the treatment of cancer cervix
- It gives a distinct chance (20%) of cure to the patient
- Its offers excellent palliation

References

- Netters Atlas of Anatomy
- J.Pelvic Surgery Sep2002
- Journal of Minimal Invasive Gynaecology
- J.of Biomedical Sci, March 2009
**Extreme dissection**

What surgical horizons?

David B. Redwine, M.D.
Bend, Oregon

PG Course 111
41st Global Congress
Las Vegas, NV
November 5, 2012

**Disclosure**

I have no financial relationships to disclose.

**Objective**

Objectives
- Demonstrate unusual and difficult dissections in the surgical treatment of endometriosis
- Describe the rationale behind such dissections

As a result
- Attendees may augment their surgical skill set for better surgical care of their patients

**Extreme dissection**

Most often required in excision of endometriosis

Surgical treatment of endometriosis demands complete freedom within the abdominal and thoracic cavities

Surgical treatment of endometriosis is excellent training for everything else

**Extreme dissection**

Surgical treatment of endometriosis is excellent training for everything else

- **angiolyisis**
- neurolysis
- intestinal resections
- urological resections
- diaphragmatic resections

Did I miss any organ systems?

If you can excise endometriosis anywhere laparoscopically, you can treat anything everywhere laparoscopically

If you can’t excise endometriosis laparoscopically, learn how to do it at laparotomy.
Important principles of severe endometriosis:

- Ovarian endometriosis carries a higher risk of:
  - more extensive pelvic involvement
  - intestinal involvement

Positive scans of endometriomas are misleading – there is more disease!

If you plan to treat only ovarian disease, you will leave a lot of disease behind.

Three examples:

- Diaphragmatic endometriosis
- Intestinal endometriosis
- Umbilical endometriosis

Rectosigmoid resection

Ultimate nerve sparing

Symptomatic disease is always on posterior diaphragm behind liver

Diaphragmatic resection
Extreme dissection
Diaphragmatic resection
Do pelvic, intestinal surgery first

Left lateral decubitus position
Allows liver to fall away from diaphragm

References


END OF STORY
Extreme Situation in Oncology

Professor Christophe Pomel

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I have no financial relationships to disclose

OBJECTIVE

Laparotomy / laparoscopy and extreme situation in surgical oncology

Gynaecologist oncologist surgeons have to deal with dramatic amount of variety of disease And various anatomical areas From the top of the diaphragm till the vulva

Size of the Mass/Tumour

And also nature of the tissue are extremely variable in the field of GYNAECOLOGIC MALIGNANCIES.
With One objective
CLean the disease / O residual tumour

Furthermore dissection after
- chemo-radiation
- chemotherapy alone is sometime extremely difficult

Operation in early stages is very different than operating on pre-irradiated tissue.
The majority of laparoscopy procedures in oncology are for early stage disease

Patients benefits:
- less blood loss.
- less scar.
- less pain.
- Short hospital stay.
- quick recovery.

"the laparoscopic approach to radical prostatectomy has become widespread with several technical variations»

-Trabulsi, Guillonneau

-Zheng SB, Liu CX, Xu YW. Laparoscopic radical cystectomy and sigmoid colon orthotopic neobladder reconstruction: report of 26 cases
Three randomized studies of colo-rectal cancer treated by laparoscopy without compromising survival


872 patients de 48 institutions!!!

Because the laparoscopy was use in the anterior part of the pelvis by the urologist, the posterior part by the colorectal surgeons, we started to perform laparoscopic pelvic exenteration in 2002

We started doing pelvic exenterations in 2002.

All patients were operated after failure of chemo-rad treatment

- abdominal MRI
- thoracic Scan
- TEP Scan

The procedure

Confection of the ileal loop conduit
• Pomel C and Castaigne D.
Laparoscopic hand assisted Miami Pouch following laparoscopic anterior pelvic exenteration.
Gynecol Oncol. 2004 May; 94 (2): 543-545.

C. Pomel, R. Rouzier, M. Pocard, A. Thoury, L. Sideris, P. Morice et al.
Laparoscopic total pelvic exenteration for cervical cancer relapse.
Gynecol Oncol, 91 (3) (2003), pp. 616–618.

G. Ferron, D. Querleu, P. Mortel, B. Letourneur, M. Soulie
Laparoscopy-assisted vaginal pelvic exenteration.

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Creation of the Miami pouch during laparoscopic-assisted pelvic exenteration: the initial experience.

E. Lambaudie, F. Narducci, E. Leblanc, M. Bannier, G. Houvenaeghel
Robotically-assisted laparoscopic anterior pelvic exenteration for recurrent cervical cancer: report of three first cases.
Gynecol Oncol, 116 (3) (2010), pp. 582–583.

A. Martinez, T. Filleron, L. Vitse, D. Querleu, E. Mery, G. Balague et al.
Laparoscopic pelvic exenteration for gynaecological malignancy: is there any advantage?

Laparoscopic pelvic exenteration for advanced pelvic cancers: A review of 16 cases.
Shahath Ramadan et al.
1. No technique limits with laparoscopy for cervical cancer treatment whatever the stage.

2. They are still ergonomic and volume limits.

   - Tumor of more than 10 cm
   - Previous large abdominal surgery with strength adherences.
   - Obesity (BMI > 31)

LIMITATIONS OF LAPAROSCOPY

Vaginal reconstruction and the use of laparoscopy ???

LIMITATIONS OF LAPAROSCOPY

- Isolated pelvic perfusion

LIMITATIONS OF LAPAROSCOPY

- Vascular resection for gynaecological malignancies
  - Vena cava
  - Internal iliac vessels
  - Common and/or External iliac vessels
Vascular resection for cervical cancer relapse
Inferior cavectomy

Vascular resection for ovarian cancer relapse
Lateral extension of resection: Okabaishy

Inferior C+avectomy

Vascular resection for ovarian cancer relapse
Lateral extension of resection:
Resection of common and external iliac vessels

Ileo-ureteric plasty

OVARIAN CANCER

The need of upper abdomen expertise
HIPEC and ovarian cancer

Sugarbaker and colleagues reported 7 cases of laparoscopic intra-peritoneal hyperthermic chemotherapy (EJSO: September 2006).

Gynaecologist oncologists are always touching the boundaries of other specialties...

They are in fact dealing with:

- General surgery
- Urology
- Colorectal surgery
- Vascular surgery
- Plastic surgery
- Medical oncology

...it is still utopian to consider that all Gyn Onc cancer can be treated by full laparoscopic approach.
The Philosophy of Extreme

A. Wattiez, M. Puga, J. Albomoz, E. Faller

Disclosure

• Consultant: VECTEC, Karl Storz Germany

What is extreme?

Participating or tending to participate in a very dangerous or difficult task

Video 1
definition

Participating or tending to participate in a very dangerous or difficult sport

------to reach the limit

• Understand

• Strategy & Rules

• Training

To Understand

Laparoscopy is more than just another surgical route....
Vision is power

Ergonomy
Ergon = Work
Nomos = Law

quantitative and qualitative study of the work in order to improve their conditions and increase the productivity

Strategy & Rules

Strategy
1. Systematization of steps
2. Exposure
3. Strict hemostasis
4. Do not irrigate
5. Never stop to look at the screen

Why?
• Keep your assistant
• Improve Vision
• Improve surgical performance
• Save Time
Train hard

Do not underestimate training!

HOW?

Fantasy
Courage
Innovation
Conviction
Perseverance
Humility

if you don’t try you’ll never know!

......but

Never stop looking at the screen

Surgery is 75% cerebral and 25% manual

Specially when the situation is not stable

......To push the limits
Surgery cannot be unpredictable.....

Dissection is the Pivot step of surgery

• Surgery is a succession and/or an addition of basic actions.
• These single actions are not very «smart», but they act together or interact to create sophisticated surgical actions.

• These surgical actions can be named «emergent» because they transcend the complexity of their original entity.
• Only «the surgical emergence» is an art, because its tightly depends on the surgeon’s capacity.

video

Thank you for your attention!
What Is Behind My Extreme Attitude

DR. SHAILESH PUNTAMBEKAR
MD
ASSOCIATE PROFESSOR
MEDICAL DIRECTOR
GALAXY CARE LAPAROSCOPY INSTITUTE, PUNE, INDIA

Disclosure
- I have no financial relationships to disclose.

Going back to roots
- Basic training as surgeon.
- Trained as a cancer surgeon at Tata Memorial Hospital, Mumbai from 1989-1993.

Mindset
- One sees what the mind wants to see
- The famous TMH philosophy-
  Everything is resectable when
  - It is not fixed to the operating table!
  - There are no metastases in the distant relatives!

India
- Cancer Cervix is still the numero uno among female cancers
- Large number of cancer cervix patients
- No screening system in place yet
- Radiation facilities available at few centers
- State of art facilities available in big cities

Indian scenario:
- Ca cervix kills one Indian every 7 minutes.
- Three-quarters of the world’s burden of cervical cancer falls on developing countries such as India.
- Late presentation is predominantly due to both inadequate knowledge and lack of effective screening, especially in rural areas.
- In developing countries more than three-fourths of these cancers are diagnosed in advanced stages with poor prospects for long-term survival and cure.
Surgical Philosophy

- Screening and diagnostic facilities poor
- Less awareness for the disease
- Many patients presented in advanced stage of the disease

Surgical Philosophy

- Chemotherapy and radiation therapy second options
- Anterior CT+RT was not available
- Hence Radical surgery was the chosen path

Surgical practices

- Thus exenterative procedures were very common
- This was duly followed in my practice after passing out
- Thus in 12 years of open surgical practice- more than 60 exenterations done

Evolution of laparoscopic radical hysterectomy

- The philosophy and the surgical skills were already developed before embarking on laparoscopy.
- In 2004, first laparoscopic radical hysterectomy was done by us.
- Opposition to this procedure came from most established centers doing open radical hysterectomies

- Two things that my Guru taught me-
  - “Surgery takes place in the mind and is just executed on the table!”
  - “Science progresses more by opposition than by appreciation!”

The urge to match the outcome to that of open surgery and make laparoscopic radical hysterectomy a duplicable procedure-

BIRTH OF PUNE TECHNIQUE!
A new Era

• Gone are days of “big surgeons – big incisions”
• Current philosophy- “big surgeons-small incisions”
• Innovations ride on the shoulders of technology.

Next three years-
• Completed more than 250 lap radical hysterectomies
• Downstaging of the tumor by anterior chemo-radiation-more patients in operable stages
• Patients with central recurrences after completing chemo-radiation were referred

Reaching a plateau

After doing a considerable no of lap radical hysterectomies-
• The confidence levels increased
• An excellent trained team was in place
• Advanced optics and energy sources available
• Better understanding of lap anatomy- like the only structures to be preserved were the ureters and the external iliac vessels.

World Scenario

Involvement of contiguous organs—a contraindication for laparoscopy.
• Serosal involvement- contraindication for laparoscopy.
• Postchemo/radiotherapy- patients presented with resectable diseases.
The world scene
• By 2005 - only two case reports of laparoscopic exenteration available in literature -
  - by Pommel et al


World Scene
• Increased importance to quality of life
• Demanding patients
• Technological advances - better instrumentation, energy sources, better optics

The next summit
• High volumes and experience of open exenterative procedures -
  - the idea of laparoscopic exenterations was born.
• We started with anterior exenterations -
  - graduating to
  - posterior exenterations
  - Total pelvic exenterations

• After successfully completing a good number of laparoscopic exenterations, the robotic exenterations followed with equal success

The confidence and competence
• Surgical confidence is
  - directly proportional to surgical competence
  - inversely proportional to complications.
• As the competence grew
  - the confidence grew
  - the complications reduced

• Alexander Brunschwig gave the world message to do anterior exenterations
• Pune brought the laparoscopic exenteration to the world – live telesurgery @ the AAGL annual conference in 2010
Which is the next summit

• The ideal urinary diversion
• Natural orifice surgery
• Single port surgery

The mission

• What America believes in-reproducibility
• Thus what starts as anecdotal grows into a series and as more and more centers adapt the procedure will be an accepted procedure!

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• Journal of Minimal Invasive Gynaecology
• J.of Biomedical Sci, March 2009
What is behind my extreme attitude?

David B. Redwine, M.D.
Bend, Oregon

PG Course 111
41st Global Congress
Las Vegas, NV
November 5, 2012

Disclosure

I have no financial relationships to disclose.

Objective

Objectives
- Describe the journey I’ve taken to become an über surgeon
- Explain why I undertook this journey

As a result
- Attendees may decide whether to take such a journey for themselves

What is behind my extreme attitude?

Simplicity of treating endometriosis
1. Woman has disease
2. Disease causes pain, ? infertility
3. No medicine eradicates disease
4. Surgeon removes disease

What could be more simple?

Corollaries

- Medicine treats only symptoms
- Surgery treats the disease
- Medical therapy is a cliché

“Why don’t doctors treat the disease instead of just the symptoms?” The Public at Large

What is behind my extreme attitude?

Lupron treatment of endometriosis
By one year after stopping treatment:
- 62% have not returned to baseline E2
- 50% have E2 < 100
- 12.5% have E2 < 20

Is long-term ‘improvement’ at expense of ovarian function?

M84-042

38
What is behind my extreme attitude?

Lupron treatment of endometriosis

Placebo rate with Lupron: 5% - 14%, depending on symptom
Dropout rate due to side effects: 9.4%
100% of patients completing Rx require OTC or narcotic meds during treatment
45% require narcotics during time of peak Lupron efficacy

What is behind my extreme attitude?

Lupron-only x 6 months treatment of endometriosis

Placebo rate with Lupron: 5% - 14%, depending on symptom
Dropout rate due to side effects: 9.4%
100% of patients completing Rx require OTC or narcotic meds during treatment
45% require narcotics during time of peak Lupron efficacy

What is behind my extreme attitude?

Lupron-only x 6 months treatment of endometriosis

The symptom responding best is dysmenorrhea, a uterine symptom
Between 42% and 73% of patients still had pelvic pain or tenderness at final check during maximum Lupron effect

What is behind my extreme attitude?

Lupron treatment of endometriosis

Many other major ‘data management problems’

Original proprietary studies which brought Lupron to market.
Now under federal court seal at request of Abbott Labs.

WHY?

The “D” is silent

DISTRIBUTION RESTRICTED

“Ablation” of endometriosis

Vascular adhesions
Carbon
Persistent endometriosis
What is behind my extreme attitude?

“Ablation” of endometriosis

- No path report
- No follow-up in reoperated patients
- No evidence of efficacy in eradication or reduction of disease – symptoms only
- Illogical for treatment of deep endometriosis
- Can’t always treat superficial endometriosis

“Ablation” can’t treat deep or intestinal endometriosis safely

Superficial endometriosis

- Fibrosis around nerve
- Nodule of endometriosis

Ablation of endometriosis

Converts all disease into superficial disease in the surgeon’s mind

Excision reveals the truth

In the beginning . . .

Before birth control pills
Before danazol
Before GnRH agonists
Before progestins
Before aromatase inhibitors
Before anti-angiogenics
Before laser
Before electrocoagulation

There was excision. And it was good.

HOW GOOD?
Let’s talk about “CURE”

Cure (n):
1. a complete or permanent solution or remedy
2. a process or method of curing

How to prove cure of endometriosis?

Symptom relief?
NO. Pain symptoms can be due to non-endometriotic syndromes. Absence of symptoms doesn’t prove absence of disease.

Pregnancy in infertile women?
NO. Infertility can be due to non-endometriotic issues. Successful pregnancy doesn’t prove absence of disease.

Reoperation after medical/surgical treatment?
YES. Reoperation is the only way to judge if disease is present or absent

CURE = absence of disease at reoperation

Absence of endometriosis at reoperation:

If not CURE, then what should we call it?
Remission?
NO - endometriosis is supposed to recur with the next menses
Occult endometriosis?
NO - you can’t diagnose endometriosis by its absence
Occult advanced cancer?
NO - this makes as much sense as diagnosing endometriosis by its absence

Endometriosis: conservative excision at laparotomy

“...recurrence is not frequent, and cure... by conservative surgery is usual.”

J. V. Melgs
Obstet Gynecol 2:46,1953

Published CURE rates following excision

As judged among reoperated patients:

85% cured by laparotomy excision
67% cured by laparoscopy excision
Redwine DB. Fertil Steril 1991;56:628-34
67% cured by laparoscopy excision
Varol et al. JAAGL 2003;10;182-9
96% cured by laparoscopy excision
Abbott et al. Fertil Steril 2004;82:878 - 84
68% cured by laparoscopy excision
Roman JD. JAMA 2010;17:42 - 6.

(No post op medical therapy routinely in any series)
* DISEASE REDUCTION IN MOST OF THE OTHERS
Evidence-based medicine:
1. Bad
2. Not good
3. Good
4. Pretty darn good
5. Darn good

Excision of endometriosis is 5. Darn good!

EXCISION IS THE ONLY THERAPY PROVEN TO CURE ENDOMETRIOSIS.

Excision of endometriosis - the gold standard

Endometriosis surgeon
Has to be able to treat disease anywhere
- Pelvis
- Bowel
- Bladder
- Ureter
- Diaphragm
- Thorax
- Umbilicus
- Skin
- Prostate

Endometriosis surgery
- individual über-surgeon vs multi-disciplinary team
- What is best for the patient?

Endometriosis surgery
Individual surgeon – surgical privileges required
- Bowel
- Urological
- Gyn
- Diaphragmatic
**Endometriosis surgery**

**Individual surgeon – advantages**

- Focused, highly specialized skill set is developed
- Maximum experience is always at the operating table
- Less need for coordination of offices
- Less need for preop scans

**Endometriosis surgery**

**Individual surgeon – disadvantages**

- Surgery can be exhausting
- Sense of isolation
- Difficult to gain credentials
- Politically incorrect

**Endometriosis surgery**

**Multi-disciplinary team – advantages**

- General non-gyn skill set is available
- Generic experience in non-gyn cases
- Other specialties usually available for pre- or intra-operative consult
- Politically correct thing to do
- Safe for the surgeons
  - Is it best for the patient?

**Endometriosis surgery**

**Ad-hoc multi-disciplinary team – disadvantages**

- A general surgeon may want to do an intestinal diversion for seromuscular laceration
- When simple suture repair is best
- A urologist may just want to do a psoas hitch
- When segmental resection/anastomosis is best
- Others may want to remove the pelvic organs and leave the endometriosis in
  - When removal of all endometriosis is best
  - The care you planned for your patient can be hijacked

**Endometriosis surgery**

**Best for the patient:**

- Excision of all disease by a dedicated multi-disciplinary team
  - or
- by an Über-surgeon

  - If not by laparoscopy, then by laparotomy

**Endometriosis surgery**

**Phrases to avoid:**

- “Let’s not do such aggressive surgery, it will cause adhesions which might cause infertility.”

Initial laparoscopic view
Endometriosis surgery

Phrases to avoid:
"Let's not do such aggressive surgery, it may cause injury. After all – PRIMUM NON NOCERE (Hippocrates)"

What I actually said was:
"The physician must . . . have two special objects in view with regard to diseases, namely, to do good or to do no harm."

Redwine, Googling Endometriosis: The lost centuries 2012

Endometriosis surgery

Phrases to avoid:
"It's not really necessary to do all that aggressive surgery when good medical treatment is available."

Medicine treats only symptoms, not the disease

"We'll clean up any residual disease with Lupron."

Lupron no better than bocs - Vercellini et al, 1993; Guzick et al 2011

"There are dense adhesions in the cul-de-sac. This patient must have had an STD."

This is complete obliteration of CDS with invasive endometriosis!!

"If you would just get pregnant, it would help your disease a lot. Most women are cured by pregnancy."

Pregnancy does not eradicate endometriosis

"The uterus, tubes and ovaries are uncommonly involved by endometriosis. Most disease will be left behind. Sampson 1940; Redwine, 1987 Aromatase problem

Endometriosis is the only benign disease which is treated surgically by removal of something else.

Redwine, 1994

References


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https://www.creativespace.com/3497664


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WHAT IS BEHIND MY EXTREME ATTITUDE

Professor Christophe Pomel

I have no financial relationships to disclose.

Extreme attitude need the addition of

-Multidisciplinary approach

- Quality control

Example of ovarian cancer

Only patient with complete resection can expect an acceptable 5 year overall survival rate.

- Chi DS, Masa F, Dao F, Zivanovic O, Sonoda Y, Leitao MM, et al. An analysis of patients with bulky advanced stage ovarian, tubal, and peritoneal carcinoma treated with primary debulking surgery (PDS) during an identical time period as the randomized EORTC-NCIC trial of PDS vs neoadjuvant chemotherapy (NACT). Gynecol Oncol 2011

Complete surgery is the goal
The so called « optimal surgery » should be avoided.

To reach that objective a various important technical surgical action are to be considered.

« aggressiveness and complexity of surgery must stay in keeping with both morbidity and quality of life issues»
Lymphadectomy / no lymphadenectomy (Benedetti et al.)

Quality of peritonectomies in all areas...

Complete / uncomplete

Quality of posterior pelvic exenteration: « one block resection»
Quality control

Whatever extent of the disease and surgeon’s expertise, complete resection is not always possible

Preoperative assessment ++

MRI, CT, PET,
… laparoscopy ?

Quality Control

Patient’s status? Evaluation of resectability

Oncogeny, anesthetic, nutrition…

Will both patient and family accept the surgery and consequences?

Per and postoperative morbidity, lost of function and autonomy, nutrition…

Need for multidisciplinary approach with high level of expertise +++

Radiologist, radiotherapist, medical oncologists, gen onc…

Appropriate hospital

Per operative team, ITU…

Role of biology in the future?

- CA 125 = WHAT IS THE CUT OFF VALUE = 500 iu/ml 1000 iu/ml ?
- IN THE NEAR FUTURE : GENOMIC ANALYSIS BY DNA CHIPS ?
( Berchuck 2004)

Role of C.T. SCAN (ovarian cancer)


ROLE +++ of laparoscopy for preoperative assessment of peritoneal resectability

As HIPEC procedure…

Avantage of laparoscopy

1. Simple procedure
2. Biopsies

PCI scopy = PCI tomy

- Small bowel
- Omentum
- Pelvis
- Anterior part of the diaphragm
- Parieto-colic gutters

Pitfalls of laparoscopy

PCI scopy < PCI tomy

- Fixed omentum
- Infiltration of posterior aspect of the diaphragm
- Suprahepatic vessels
- Posterior aspect of the porta hepatis
- Lesser sac
- Coeliac trunk

PCI index (Sugarbaker)

Peritoneal Cancer Index

Photos-videos

Behind my extreme attitude

CONCLUSION

Contract of good practice:

- Appropriate Human resources and hospital:
  - Hospital (ITU / 24H imaging availability ...)
  - Doctors:
    - Radiologist, Pathologist, Surgeons with vascular, urologic, colorectal expertises, medical / Gyno-onc
  - « Surgery for advanced gynaecological cancer is not a limit to gynaecological surgery »

- Appropriate management and MDT (including medical alternatives)
- Balance the decision
  - « quality of life / quantity of life »


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).