Didactic:

Falling Off a Horse Named “Surgical Misadventures”: How Do You Get Back in the Saddle?

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Professional Education Information

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

Accreditation
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The AAGL designates this live activity for a maximum of 3.75 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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This course provides a detailed and prescriptive dialectic on typical complications encountered in minimally invasive gynecologic laparoscopic surgery. In addition to presenting skills to prevent complications and managing them when they befall us, the course material delves into the pertinent medico-legal strategies implied by the area considered, and surveys the professional and personal impact of maloccurrences and how to survive them. Course material covers a range of clinical scenarios including position-related injury, abdominal access, electro-surgery, and genito-urinary and gastro-intestinal events.

Learning Objectives: At the conclusion of this course, the clinician will be able to: 1) Define pre-surgical strategies to minimize and prevent surgical maloccurrence; 2) apply anatomic knowledge and technical skill to dissect, protect and repair GU and GI structures; and 3) develop strategies to manage the professional impact of surgical maloccurrence.
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<td>Questions &amp; Answers</td>
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<td>D.I. Eisenstein, M. Dahlman</td>
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<td>• The “Difficult” Bladder: Strategies and Techniques</td>
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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).
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Linda Michels, Executive Director, AAGL*
M. Jonathon Solnik*
Johnny Yi*

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David I. Eisenstein
Speakers Bureau: Abbott Laboratories
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Maggie M. Finkelstein*
Rajiv Gala*
Matthew M. Palmer
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Asterisk (*) denotes no financial relationships to disclose.
Falling Off a Horse Named “Surgical Misadventures”:
How Do You Get Back in the Saddle?

David Eisenstein MD FACOG
Henry Ford Health System

- Speakers Bureau: Abbott Laboratories

IVC INJURY: MP4

BLADDER : WMV

GI Injury MP4

Ureteral Injury MP 4
Dealing with Complications
Lam et al; Best Practice & Research; 200

• Definition of Complication as
  “a new problem or illness that makes
treatment of a previous one more complicated
or difficult”

Complications by Type
Total N=30,000;
4.6/1000 Overall Complication Rate

<table>
<thead>
<tr>
<th>Injury Type</th>
<th>% Access Injury(%)</th>
<th>Unrecognized(%)</th>
<th>10 year trend</th>
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<tbody>
<tr>
<td>Overall</td>
<td>Overall: 34.1%</td>
<td>Overall: 28.6</td>
<td>Decrease</td>
</tr>
<tr>
<td>GI</td>
<td>34.5</td>
<td>32.5</td>
<td>43.8%</td>
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<tr>
<td>GU</td>
<td>27.4</td>
<td>13.1</td>
<td>23.7%</td>
</tr>
<tr>
<td>Vascular</td>
<td>32.4</td>
<td>37.4</td>
<td>20.0%</td>
</tr>
<tr>
<td>Infectious</td>
<td>5.0</td>
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Chapron et al; 1998, Human Reproduction

Complications at Laparoscopy 1987-1995
Chapron et al Human Reproduction 1998

• Rate 4.6/1000; 3.2/1000 requiring laparotomy
• Mortality 3.3/100,000 (N=1; vascular/arterial)
• Impact of surgical experience
  – Decrease bowel injury (p = .0003)
  – Decrease laparotomic management (p = .01)

Complications at Laparoscopy 1987-1995
Chapron et al Human Reproduction 1998

N=30,000 case/9 centers

Complications by Type
Diagnostic Minor Major Advanced
19% 19% 49% 11%
Rates of Complication (per 1000)
.84 4.3 17.45

Dealing with Complications: ACT
Lam et al; Best Practice & Research; 200

• A: Awareness
• C: Communications/Counseling
• T: Teamwork

Dealing with Complications: Phases
Lam et al; Best Practice & Research; 2009

• Phase I – Patient identification
• Phase II – Anaesthesia and positioning
• Phase III – Abdominal entry and port placement
  – >50% injury; GI, GU, Vascular
• Phase IV – Surgery & Procedure – Related Events
  – Adhesiolysis(GI); TAH=GU; Myomectomy=hemorrhage
• Phase V – Postoperative recovery
  – GU and GI injury and late presentation
• Phase VI – Counseling
GU injury Prevention at LH: Experts Jansen, JMIG 2011

Consensus
- Education
  - Text/video; simulation
- Fellowship
  - Learning Curve (Normal)
- Technique
  - Uterine Manipulator
  - Dissect Uterine as / Coaptation perpendicular to cervix
  - Restore Distorted Anatomy/Develop PV Space in certain scenarios
- Diagnosis
  - Early Detection

Non-Consensus
- Education
  - Learning Curve (Abnormal)
- Technique
  - Angled Lens
  - Routine Ureterolysis
  - Cystoscopy
  - Routine Dissection techniques
- Diagnosis
  - Any routine use of stents; dye; cystoscopy

ACCESS
ABDOMINAL WALL ADHESIONS AND PRIOR SURGERY

<table>
<thead>
<tr>
<th>STUDY</th>
<th>% / no. Patient</th>
<th>% / Low PF</th>
<th>% / UVM</th>
<th>% / HVM</th>
<th>% BOWEL INVOLVEMENT</th>
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<tr>
<td>BRILL ET AL 1995</td>
<td>NA</td>
<td>27</td>
<td>55</td>
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<td>NA</td>
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<td>59</td>
<td>AAA</td>
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<td>68</td>
<td>19.8</td>
<td>51.7</td>
<td>AAA</td>
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<td>DUBUISSON 2010</td>
<td>.28</td>
<td>13</td>
<td>67</td>
<td>100</td>
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</tbody>
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PF = PFANNENSTIEL; UVM = LOW VERTICAL; HVM = VERTICAL ABOVE UMBILICUS

Scheib et al JMIG 2014

Injury Prevention: Anatomic Spaces

Adverse Events: Impact on Physicians

Peri Operative Death in Anesthesia

- >70% experienced guilt, anxiety, reliving event
- 88% required time to "emotional recovery from 1 Day(12%) to Never recovered (19%); 12% considered Career change
- 68% supported mandatory debriefing/75% offering time off
  - Debrieving us with blame/fear of litigation/personally responsible depressed

Impact of Adverse Events on OB/Gyn

Survey Data: Perinatal Death

Gold et al O&G 2008

- Demographics
  - 804/1500 Surveys: 50% male/female; 46 Y.O.
- Impact
  - 75% admitted to “large emotional toll”
  - 8% considered giving up practice
- Coping
  - 53% "adequately trained" in coping skills
  - Statistically significant decrease in guilt and personal responsibility
- Method of Coping:
  - 87% informally with colleagues; 58% friends and family; 47% case review
Gynecologists and Adverse Events
ACOG survey

- 9006/32,238 completed surveys
- Age 50.7; 19.8% Gyn only; 3.4 TAH/mo.
- 1496 GYN claims; 44.4% “surgical complications; 28.7% TAH, 14.6% Laparoscopic
  - 29.1% Patient injury-major
  - 22.1% Delayed/Failure Dx
  - 20.7% Patient injury-minor

Practice Changes Due to Cost of Insurance

- 12.4% decreased volume procedures
- 5.2% stopped performing procedures
- 1.4% stopped performing surgery
- 16% report >10% drop in income; 2.3% relocated

Practice Changes Due to Liability Fears

- 18.9% decreased surgical procedures
- 6.7% stopped major procedures
- 1.4% stopped performing surgery
- 12.3% changed to employment model; 3.6% relocated

At the conclusion of this course, the clinician will be able to:
- 1) Define pre-surgical strategies to minimize and prevent surgical malocurrence;
- 2) apply anatomic knowledge and technical skill to dissect, protect and repair GU and GI structures; and
- 3) develop strategies to manage the professional impact of surgical malocurrence

How to Get Back in the Saddle?
How to Get Back in the Saddle?

- Audebert, A, Gomel, V: Role of Microlaparoscopy in the Diagnosis of Peritoneal and Visceral Adhesions and in the Prevention of Bowel Injury Associated with Blind Trocar Insertion; Fertility and Sterility 2000;73:631-35

REFERENCES

Cognitive Review Question
Practices shown in the literature to improve management of complications include:
1. Practicing dissection in a box trainer
2. Learning to assemble a cystoscope
3. Accessing coping resources in your institution
4. Getting to know your anesthesiologist
5. All of the above
Falling Off a Horse Named “Surgical Misadventures”: How Do You Get Back in the Saddle?

Professional and Personal Impact

Rajiv B Gala, MD, FACOG
Associate Professor
Ochsner Health System
New Orleans, LA (USA)

Objectives

- Appreciate the four different scopes of impact an adverse event can have
- Be able to define a “second victim” and identify circumstances that would evoke a second victim response
- Describe the six stages of personal recovery
- Identify the three tiers of support necessary for optimal personal/professional recovery

My Background

- Practicing General Obstetrician/Gynecologist at Ochsner Medical Center (New Orleans, LA)
- Married to another Ob/Gyn
- Program Director – Ochsner Ob/Gyn Residency Program
- “Volunteered” to help with the Adverse Events in Ob-Gyn Video

Audience Response #1

- Have you ever experienced an adverse event?
  - Yes
  - No

Audience Response #2

- Did an adverse event limit the scope of your practice?
  - Yes
  - No

Disclosure

- I have no financial relationships to disclose
Audience Response #3

Does your institution have an official crisis management team to help you deal with an adverse event?
- Yes
- No

Right before vacation....

Initial Responses

Different Scopes of Impact
- Patient
- Patient’s Family
- Personal
- Professional

My Initial Personal Impact
- Psychological
- Irritable
- Anger, guilt, frustration
- Cognitive
- Inability to concentrate
- Distracted
- Physical
- Fatigued
- Headaches
My Initial Personal Impact

- Emotional Impact
  - Personally responsible for the unexpected patient outcome
  - Felt as though I failed the patient
  - Second guessed knowledge base
  - Second guess clinical skills

“Second Victim”

- Wu et al (2000)
  - “Second Victim” – Used to describe the health care professionals who were traumatized by such events in a similar way as the patient – the ‘first victim’.

- Scott et al (2009)
  - Regardless of gender, professional type or years in the profession, the adverse event was “a life-altering experience that left a permanent imprint on the individual”

“Second Victim”

- High risk scenarios that can evoke a second victim response
  - Unexpected patient death
  - Long-term care relationship with patient death
  - Death in a young adult patient
  - Preventable harm to patient
  - Multiple patients with bad outcomes within a short period of time within one clinical area
  - Patient who “connects” to health care professional’s own family

Professional Impact

- Continuation of clinical responsibilities
  - Flashbacks
  - Challenges upon your confidence
  - “Sign of weakness” if you took a break
  - Avoidance of similar situations

- The Obstetrician-Gynecologist Workforce in the United States: Facts, Figures, and Implications, 2011
  - Workforce is ageing
  - Ob/Gyn is among the most stressful medical specialties
  - Litigation concerns is a major factor in the early retirement of ob-gyn and in the shift to gynecology-only practices

- Impact to medical team and individual members
  - Residents
  - Medical students
  - Nursing staff
Recovery Process for Providers

- Time to debrief
- Signs and symptoms of this emotional aftershock may last a few days, few weeks, months, or longer
- Quality of existing support systems can impact the speed and quality of the debrief period

Stage 1 – Chaos and Accident Response
- Error realized
- Get help
- Team-training drills / simulation prepares you for this

Stage 2 – Intrusive Reflections
- Haunted re-enactment of the event
- Re-evaluate scenario in detail
- Self-isolation

Stage 3 – Restoring personal integrity
- Managing gossip/grapevine
- Regaining acceptance at work
- Fear is prevalent

Stage 4 – Enduring the Inquisition
- Respond to multiple "why's" about the event
- Interact with many different event responders
- Realization of level of seriousness
- Litigation concerns emerge

Recovery Process for Providers

Stage 5 – Obtaining Emotional First Aid
- Avoid isolation
- Seek personal/professional support

Stage 6 – Moving On
- Dropping out: Feelings of inadequacy
- Surviving: Persistent sadness, still have intrusive thoughts
- Thriving: Gain insight/perspective; advocate for patient safety initiatives

Culture Change Needed
- Traditional environment
  - “Blame/Shame”
  - “M&M”
  - “Whispering”
- Ideal environment
  - One-on-One Support
  - Individual Support
  - Institutional Support

One-on-One Support
- As the healer, you don’t have to have the answer
- Show compassion and help open the door to future conversation
- Call someone who had a recent event
- Be patient and allow for silence

Individual Support
- MITSS (Medically Induced Trauma Support Services)
  - www.mitss.org
  - 1-888-36-MITSS
- University of Missouri “ForYOU Team”
  - Three tiered Intervention Model
    - Tier 1 – Local support
    - Tier 2 – Trained peer support
    - Tier 3 – Established referral network (SW, psychologist, employee assistance)

Institutional Support
- Internal culture of safety
- Organizational awareness
- Formation of a multi-disciplinary advisory group
- Leadership buy-in
- Risk management considerations
- Clear policies, procedures, and practices!
- Learning and improvement opportunities
Now what?

- Hope this empowers you to start a conversation
- How does your organization manage the aftermath of a serious clinical adverse event?
- What internal resources do you have?
- Do you have a crisis management team?
- Is the organization aligned around transparency and approach?
- Ullström et al (2014)
  - Impact on the healthcare professional was related to the organization’s response. Most lacked support or received unstructured/unsystematic support. Made it more difficult to process the event and reach closure

Now what?

- Three Objectives
  - Encourage and help every organization to develop a clinical crisis management plan before they need to use it
  - Provide an approach to integrating this plan into the organizational culture of quality and safety, with a particular focus on patient- and family-centered care and fair and just treatment for staff; and
  - Provide organizations a resource in the absence of a clinical crisis management plan

References

Introduction to Legal Principles and Ramifications of MalOccurrence

Maggie M. Finkelstein, Esq.
Shareholder, Stevens & Lee, PC
November 18, 2014

Today

• Introduction to Legal Principles
• Update on Your Medico-legal Environment
• Some Clinical and Professional Liability Fixes

Goals:
• Demystify medical malpractice principles so you can enhance your attack on preventing and mitigating lawsuits
• Understand the interplay of post-ACA health care environment with patient safety and liability risk
• Provide you with some examples of how you can impact liability frequency and severity in the changing medico-legal landscape while also enhancing your economics

Jury awards $62 million to Brooklyn mom who lost her legs in botched procedure at Winthrop University Hospital

Another study finds robotic surgery rival but cheaper:

Why is it Important to Understand What Constitutes Medical Malpractice?

• Change your liability equation
  – Understand what causes claims
  – Understand what elements constitute liability
  – Understand the clinical and professional liability risks
  – Understand the early warning signs that can lead to a claim
  – Know how you can reduce risk of claims
• And these strategies to reduce claims are the same strategies that can also help with your economics in the new environment

Maggie M. Finkelstein, Esq.

• A manager of OF Counsel, LLC, and a shareholder in the Healthcare Litigation and Risk Management Group of the Stevens & Lee law firm, with a focus on helping physicians to enhance safety and reduce liability risk
• Develops risk reduction opportunities in the health care industry and has evaluated various specialty-specific liability risk issues, including those associated with obstetrics, bariatric surgery and gynecology. Co-authored 50 claims for a study to evaluate trends in liability risk
• Has worked with leading clinical content experts to create new web-based quality dashboards as a diagnostic tool in obstetrics and gynecology, and bariatric surgery
• Part of a team that has created new, specialty-specific insurance programs with safety platforms, in specialty-specific areas
• Project lead on significant quality and safety evaluations and peer review evaluations for academic medical centers, international medical centers, and community hospitals
• Defends physicians and other health care providers in state board investigations, provides event management support to physicians and hospitals, and provides oversight of national defense counsel panel
• With Jim Saxton, Esq., co-author articles, books chapters, and books on loss control and risk management topics, including patient experience, liability - registration for transparency, and liability risk reduction
• Former federal law clerk to the Honorable William B. Caldwell, U.S. District Court for the Middle District of PA.
• A registered patent attorney with the U.S. Patent & Trademark Office

I have no financial relationships to disclose.
And Reasons You Should Care

- Reputational issues at stake
- These take up your time (away from patients and away from family)
- Stress
- And the avalanche effect...
  - State licensing implications
  - Loss of health payer contracts
  - State board investigations
  - Hospital credentialing / peer review
  - Medical professional liability insurance coverage

The Elements of a Standard Medical Malpractice Case

- Plaintiff must prove:
  - Negligence
  - Causation
  - Damages

- Negligence (standard of care and breach of the standard)
  - Physician fails to meet the applicable standard of care
  - Requires expert testimony for plaintiff to prove, generally

- Causation
  - That negligence is the causal link to the patient’s injury or damages
  - Generally requires expert testimony, exception: Res ipsa loquitur

- Damages
  - The patient must have actually incurred damages
  - The damages must have been caused by the negligence
  - Cannot be speculative

ACA Standards as SOC?

Federal legislation introduced 4/2013 – HR 1473
GA Governor Signs HB 499 (4/2013)

Malpractice is not a “MalOccurrence”

- Malpractice is ‘negligence’
  - Breach of the standard of care

- Mal-occurrence is an ‘adverse event’ or ‘bad outcome’
  - Maloccurrence is not malpractice

- Malpractice is NOT what in retrospect an expert thinks would have made a difference
  - “In retrospect, I can see the abnormality on the initial x-ray, although it is subtle.”

- Malpractice is NOT what could have been done better from a QA point of view

More than 70% of claims are driven by events other than malpractice

- Often it is a “plus factor”
  - Lack of effective communication and service lapses
  - And/or a lack of true event management

What are the “Plus Factors”?

- Phone calls not returned
  - Rude physicians and/or staff
  - Lack of disclosure
  - Ineffective hand offs
  - Failure to notify patient of abnormal lab test
  - After hours telephone calls not documented
  - Informed consent process
  - Lack of documentation
  - Lack of a strong physician-patient relationship

For Example:

- Detailed conversation on the phone: “No need to go to ED." You decide no reason to document the call. I'm too busy. It will never turn into anything.

Some examples
What Are the Early Warning Signs?

- Surgical Complications
- Less than desirable or surprising result
- Letter, Phone Call from a patient...or a lawyer
- Patient or family requests a meeting with the doctor
- Patient or family complaints
- Medical records request
- Patient states..."I’m have an appointment with my lawyer next week"

Plus, It’s not the same environment ....and it continues to change

- ACA
  - Transparency
  - Reimbursement tied to value
  - Care collaboration\care delivery
  - Consolidation
  - Growth of “traditional” liability issues
  - The patient experience
- Changes in patient expectations
- All impact liability

The Bottom Line

Major pressure on surgeons to demonstrate quality and effectiveness - - and to simultaneously reduce the cost of health care

Creating New or Enhanced Liability Risks

- Midlevel supervision and collaboration
- Care collaboration
- Patient Portals
- Coordinated Electronic Medical Record
- Standard of Care
  - Guidelines Used to Heighten the Standard of Care
  - Guidelines Used as Evidence of Standard of Care
- Increased Transparency
- Care Guidelines Based on Economics
- Failure to adequately supervise a PA
- Who’s in charge?
- Clinical e-communication lapses
- Guidelines used as evidence of soc or heightened soc
- Increased availability of data to plaintiffs
- Alleged care omissions b/c of costs

Economics prominent in the equation Tension with patient expectations

- “Do I really need to order that test?”
- Economic discovery?
- Punitive damages?

The “transition period” could see incremental increases in both frequency and severity.

For Example… And Remember the "Retrospectoscope"

The goals:

- Control costs
- Reduce overuse of tests and procedures
- Support physician efforts to engage patients in effective decision-making

- Will the guidelines be used against physicians?
- Or, can we improve defense of omission through guidelines?
And the Plaintiff’s Bar is Organized

- The organized Plaintiffs’ Bar is more organized than ever
- Leveraging technology
- The new “surgeon-lawyer” at plaintiff firms

Mark A. Hoffman, M.B., M.D., J.D., LL.M., Dr. Glenn Hoffman
A partner in the firm, received his undergraduate degree from Amherst College, an M.S. degree in biology and biochemistry from Tulane University, and an M.D. from Columbia University. He then completed general surgery residency at Harvard University, followed by a two-year fellowship in pediatric surgery at the Hospital for Sick Children and the University of Toronto. Dr. Hoffman then went on to complete a solid organ transplantation fellowship at Cambridge University in Cambridge, England. Dr. Hoffman practiced as an

A Focus on “Pre-Courtroom” Period

- We can (and are) defending cases differently and better
- Part 2 of the equation begins before a lawsuit is ever filed
  - Using templates/checklists
  - Enhancing patient experience and engagement
  - Documenting the good care provided
  - Addressing “transitional” risk
- Building the better, and appropriate, evidence to prevent claims, or derail claims

Some Sample Strategies...

Do a few things at a time and do them well

- Laying the groundwork for a supportive environment
- Using certain data to understand what really makes a difference

10 Steps to Better Health Care

Dr. Atul Gawande’s checklist for saving lives

Gawande on Checklists. Why Don’t... ?
Dr. Atul Gawande: How to Make Doctors Better

And move to true patient engagement

- Making patients part of the treatment decision
- Patient engagement “apps”
- Next-generation patient-responsibility agreements

Decreasing Variance = Increasing Patient Safety

What We’ve Seen
- Inconsistencies in processes
- Variances in procedures
- Gaps in implementation
- Incomplete follow-up

Dr. Paul Gluck
- Paul Chairman of National Patient Safety Foundation Board of Directors (2005-2008), after serving as a member of its Board of Directors for 15 years.
- Immediate past chair of ACOG’s new Council for Patient Safety in Women’s Healthcare.

“Most errors are the result of flawed systems. Standardized approaches can reduce variability and improve system efficiency.”

Some Documents That Can Help

- Procedure-specific informed consent
  - Educational
  - Relationship building
  - Sound documentation
- Patient history form
  - Patient engagement opportunity
- At-risk letter
  - Documentation tool
  - Patient engagement tool
- Electronic Communication Policies
  - With patient sign off

Informed Consent

- Use in pre-event discussions
  - Enhance education
  - Document patient understanding
  - Set patient expectations
- Then use it in post-adverse event discussion
- Procedure – specific
  - Attestation
  - Specific risks (including but not limited to)
  - Witness attestation

Medico-Legal Case Discussion - Allegations

Potential allegations…while it’s a known potential injury...
1. Lack of appropriate pre-surgery work-up
2. Negligent performance of surgery; and surgery should have been an open procedure
3. Mismanagement of post-op care
4. Delay in diagnosis of a bladder injury
5. Lack of informed consent about bladder injury

Case Scenario

- Patient with h/o pain, and prior surgery for adhesions. 4/21 Patient underwent robotic excision of endometriosis, lysis of adhesions, and R uretal lysis at hospital A by physician A. No issues and patient discharged. 4/21 Patient called the physician office a few hours after discharge, reporting pain and constipation. Instructed by office to try an enema. 4/22 Patient tried enema and it did not work. FV to practice; message left for physician. No return call from physician. 4/23 p.m. Patient goes to ER of a different hospital, Hospital B. 4/23 Hospital B dx a bladder injury; and repaired it.
- Physician A does not have privileges at that hospital and is unaware of her admission. 4/25 Patient calls the practice to cancel her post-op appointment, because she was still hospitalized. Patient then wrote a letter to the practice, why didn’t you identify the bladder injury... and why didn’t you call me back? No response to letter. Patient requests a copy of her op report, intra-op photos, and path report from Physician A. Patient does not return for post-op surgical visit. Patient sends an additional letter requesting physician A pay for her out of pocket expenses, pain and suffering, lost wages. No response to letter. Physician’s office visited by sheriff who serves a lawsuit...

“Plus” Factors and Prevention/ Mitigation

- Lack of sufficient documentation of procedure risks
- Recommendation of trying enema by office staff, without consulting physician A
- Failure of doctor to contact patient once known she was hospitalized at another facility
- Failure of doctor to acknowledge or respond to the patient’s letters

Today’s Take Home Points

- The same underlying issues that impact liability risk, also can impact your economics post-ACA
- Litigation continues to evolve...you can impact it before you ever get to the courtroom
- Use evidence-based safety and professional liability initiatives, persistently, to hit the trifecta:
  - Reduce clinical clusters
  - Reduce professional liability clusters
  - Enhance your economics
References

Falling Off a Horse Named “Surgical Misadventures” – How Do You Get Back in the Saddle?

GI Injury
Matthew Palmer, D.O.
Oakdale OB/Gyn – Minneapolis, MN
Graduate Fellow in MIS Gynecology – Henry Ford Health System - Detroit, MI

Consultant: Intuitive Surgical

OBJECTIVES

• At the conclusion of the lecture attendees should be able to:
  – Identify the risks factors and incidence for GI injury in laparoscopy
  – Discuss safe dissection techniques
  – Discuss techniques for repair of bowel injury

Etiology of Bowel Injury

• Up to 50% of injuries occur during entry phase:
  • Veres needle and trocar insert
  • Other types of injuries
    – THERMAL
      – direct, capacitive coupling or insulation failure
    – MECHANICAL
      – retractors, manipulation
    – LATE
      – Port site herniation (0.06-1%)
      – Anastomotic leakage (rate increases the lower the resection)

Bowel Injury

• May not be apparent for 4-5 days post-injury
• 30-50% are recognized at the time of surgery
• Sm bowel avg. 4.5 days, Colon avg. 5.4 days
• Any symptoms of peritonitis (sharp abdominal pain, abdominal distention, vomiting) must be considered a bowel injury until proven otherwise!!
• Avoid wish fulfillment – i.e. don’t ignore signs of an injury and just hope it will go away.

Incidence

• Minor operative laparoscopy associated with 0.08% risk of bowel injury
• Major operative laparoscopy associated with 0.33%
• Mortality rate 3.6%
• Injuries decrease significantly with experience
• Delayed diagnosis remains major problem; up to 15% of injuries not diagnosed during laparoscopy; one in five cases of delayed diagnosis results in death.
• Rate of umbilical adhesions after surgery
  – Group I: No prior surgery (n=469) 0.68%
  – Group II: Prior laparoscopy (n=125) 1.6%
  – Group III: Prior laparotomy with horizontal suprapubic incision (n=131) 19.8%
  – Group IV: Prior laparotomy with mid-line incision (n=89) 51.7%
• Rate of severe adhesions with risk of bowel injury
  – Grp I: 0.42%, Grp II: 0.8%, Grp. III: 6.87%, Grp. IV: 31.46%

How to Avoid

• Entry
  – Left upper quadrant entry at Palmer’s pt.
  – Direct visualized entry with clear trocar
  – Pre-op ultrasound to detect anterior abdominal wall adhesions
  – Micro-laparoscopy -> 1.2mm camera
  – Open laparoscopic entry -> Hassan
    – benefit in preventing vascular injury but not bowel

Small Bowel Injury

• Labs
  – Bands
  – Leukocytes
  – C-Reactive Protein
  – > 100 MG/L
• Free air should be absorbed w/in 24 hrs
• Obese women may not exhibit rebound tenderness
• No antibiotics/observation
  – Surgery!

How to Avoid

• Dissection
  – SHARP dissection > energy use, avoid blunt dissection
  – Use monopolar energy judiciously
    • 100 watt cutting current with very short bursts
  – Traction/counter-traction
  – Parallel to the axis of the viscus
  – Develop retroperitoneal dissection skill
  – Never cut blindly, always see your target
  – Understand anatomy and surgical planes well
Mechanical Bowel Prep

- Decrease the volume of fecal contents in the colony, which thereby decreases the total colony count of bacteria.
  - emulsifiers
  - osmolar agents
  - stimulants
- Despite the large pool of data supporting the omission of mechanical bowel preparations and changing guidelines, clinical practice has been slow to change.
- General surgery data
  - recommend against mechanical bowel preparation for the indication of decreasing infectious complications related to bowel injury or resection.
- Antibiotic bowel preparation, however, has proven beneficial in colorectal surgery and can reasonably be employed in complicated gynecologic cases at high risk for bowel involvement.

Fanning et al.

(1) Preoperative mechanical bowel preparation does not lower the risk of anastomotic leakage and infection.

(2) Elective postoperative nasogastric tube decompression increases postoperative pneumonia and does not decrease the incidence of other postoperative complications.

(3) Early feeding after major gynecologic surgery reduces hospital stay and does not increase (and may decrease) pneumonia and other postoperative complications.

(4) Early feeding, gum chewing, bowel stimulation, alvimopan, and ketorolac may decrease the incidence of postoperative ileus.

Repair

- Serosal injury
  - If underlying muscular and mucosal layers remain intact repair not necessary, suture increases future adhesions
  - Mucosa disruption → oversew serosa with 4.0 silk
- Colotomy
  - Primary repair in 2 layers
  - 3.0 Vicryl for mucosal approximation
  - 4.0 silk for seromuscular layer (perpendicular to long axis of bowel)

Repair

- Leak test (sigmoid)
  - Methylene blue with foley or air (bubbles) with Toomy/sigmoidoscope
- Call a general surgeon?
  - Open vs laparoscopic repair?
  - Resection with primary re-anastomosis
- Post-op
  - NG not necessary for small repairs
  - Advance diet starting with clear liquids per routine
  - May D/C when good BS and passing flatus

Conclusions

- Low incidence but high risk of mortality
- Delay in diagnosis is the main danger
- Incidence decreases with experience but risk is always there
- Laparoscopic re-operation must be done by an experienced surgeon
  - Get to know your hospitals subspecialists well
- Informed consent should include possibility of conversion to an open procedure

Case Study

- BM is a 38 y.o. woman with a history of chronic pelvic pain and endometriosis.
- Prior surgeries consisted of TAH, RSD and subsequent open LSO. Ongoing pain after years of recovery prompted a workup for ovarian remnant syndrome.
- Labs studies and imaging confirmed the presence of residual ovarian tissue on the left as well as a large pelvic fluid collection.
- 2011 - Underwent successful laparoscopic adhesiolysis and resection of left ovarian tissue.
- 2013 - Ongoing pain prompted additional labs and MRI of pelvis
Case Study

2013 - A second laparoscopy for adhesiolysis and exploration of right sidewall for removal of right ovarian remnant performed. 
- extensive adhesions along line of Toldt at left pelvic sidewall 
- inadvertent sigmoid enterotomy of 1.5 cm created and immediately recognized 
  - prior bowel prep in this patient facilitated a clean colon with no spillage of stool into abdomen 
  - tension-free area created to facilitate repair 
  - 2 layer closure done laparoscopically using 3.0 vicryl on bowel mucosa and 3.0 silk on serosa 
- general surgeon entered case post repair to inspect our closure and air leak test demonstrated air-tight closure

Post-op fever and pain work-up revealed a small pelvic abscess that was drained under CT guidance. 
- Patient recovered well and experienced resolution of most of her pain.

References

GU Injuries in MIGS

MARISA DAHLMAN, MD MPH
VIRGINIA MASON MEDICAL CENTER
SEATTLE, WA

I have no financial relationships to disclose.

Objectives
At the conclusion of this program, the participant will be familiar with:
- Incidence and presentation of GU injury in gynecologic laparoscopy
- Anatomy of the ureter and retroperitoneal spaces
- Strategies for preventing injury in high-risk situations
- Evidence surrounding routine use of cystoscopy and ureteral stents

Scope of the problem
Estimated rate of GU injury: 1-2% for all gynecologic procedures
- 75% of these occur during hysterectomy, leading to ~5000 injuries/year

Historically estimates of GU injury were much higher for LSC than for open laparotomy
- 1997 retrospective study: 1.3% risk of ureteral injury
- 2006 Cochrane review: OR for LSC v open 2.04 for bladder and 3.43 for ureteral injury

Cochrane review in 2009 showed no difference in injury rate by route of hysterectomy

Recent review of 40 papers estimates rate of GU injury at 0.73% for LSC hysterectomy
- Bladder 0.5-0.66%, 80% identified intraoperatively
- Ureter 0.02-0.4%, 14% identified intraoperatively

Ureteral anatomy
Crosses the pelvic brim at the bifurcation of the iliac vessels
Courses along the pelvic sidewall in the ovarian fossa
Enters the cardinal ligament complex just lateral to the uterosacral ligament
Runs beneath the uterine artery 0.5-1.5cm from the cervix
Makes a sharp turn over the anterior vaginal fornix to enter the bladder at the trigone
Ureteral vasculature

Ureteral sheath is adherent to peritoneum
Ureter derives vessels from multiple sources
Stripping of sheath may result in ischemia, delayed ureteral necrosis, and perforation

Potential spaces in the pelvis

Paravesical: bounded laterally by obturator internus muscle, medially by the bladder, anteriorly by the pubic ramus, posteriorly by the cardinal ligament
Pararectal: bounded anteriorly by the cardinal ligament, medially by the ureter, laterally by the internal iliac

Sites of injury

Bladder:
- Dome
- Trigone
Ureter:
- Pelvic brim near IP ligament
- Cardinal ligament complex near uterine artery
- Near uterosacral ligaments after plication or cuff closure

Risk factors for injury

Prior pelvic surgery (including Cesarean delivery)
Endometriosis
Pelvic adhesions
Malignancy
Enlarged uteri
Adnexal masses

Mechanisms of injury

Sharp: trocar, dissector, stapler
Thermal: electrosurgery, laser
Crush: suture, retractor, clamp
Devascularization

Up to 50% of all patients who sustain a GU injury have no known risk factors.
How to repair?

Bladder
- Dome: delayed absorbable suture in 1 or 2 layers of interrupted or running stitches, watertight repair, Foley in place x1wk, prophylactic antibiotics
- Trigone: high risk of ureteral kinking or occlusion, recommend consultation with urology

Ureteral injuries
- Partial transection: stenting usually sufficient
- Complete transection: repair varies based on location and mode of injury
- Urology should be involved unless the surgeon is highly experienced with such repairs

Delayed recognition

Bladder injuries are more likely to be noted during surgery
- Up to 80% in some studies, though as low as 33% in others
Most ureteral injuries not recognized intraoperatively
- Reported rates range from 14-30%

Consequences include fistula, loss of renal function, secondary nephrectomy
Frequent cause of litigation

Presenting symptoms

Fever
Hematuria
Abdominal or flank pain (not necessarily ipsilateral)
Ileus
Fistula with involuntary leakage
Ascites (fluid will have high creatinine)

For thermal or ischemic injury, symptoms may not present until 7-10 days postoperatively.

How to avoid injuries?

2011 Delphi procedure: experts arriving at consensus via sequential questionnaires
- Uterine manipulators to lateralize vascular pedicles
- Careful dissection of vascular pedicles
- Retroperitoneal dissection to restore normal anatomy
- Ensure adequate surgeon experience (case load, simulation, fellowship)

Techniques for difficult anatomy

Other possible strategies suggested but not supported by the Delphi analysis
- Back-filling the bladder, +/- colored fluid
- Angled laparoscopes
- Routine retroperitoneal exploration and ureteral dissection
- Routine cystoscopy
- Ureteral stenting

Role of universal cystoscopy

Relatively cheap, easy, and little to no morbidity associated
Can increase rate of intraop identification of injuries and thus reduce postop morbidity
Cost-effective if rates of ureteral injury are 1.5-2% or higher
Not useful for non-obscusive or thermal injuries
Prophylactic stenting

Evidence supports use in high-risk procedures such as radical hysterectomy or in patients with very distorted anatomy.

Associated with postop flank pain, hematuria (usually mild and transient)
No benefit to universal use shown in one randomized trial and one retrospective analysis

Lighted stents may be more useful in laparoscopy when tactile feedback is limited

Patient TM

39yo woman with endometriosis and pelvic pain underwent robot-assisted laparoscopic right salpingo-oophorectomy, left salpingectomy, lysis of adhesions.

Intraoperatively, the right ovary was densely adherent to the pelvic sidewall. The ureter was identified transperitoneally several times during dissection of the ovary.

The pt went home from the PACU with no issues and did well initially.

TM, continued

POD#12 pt called complaining of 7-8/10 pain unresponsive to NSAIDs/narcotics
POD#13 presented to ED with severe diffuse pelvic pain accompanied by menses, no other symptoms; abdominal exam benign, WBC 11.1K, UA with trace blood, sent home from ED without gyn consultation
POD#14 pt called with worsening pain radiating to upper abdomen and L flank, was sent back to ED

TM, continued

POD#14 seen in ED with worsening pain, abdomen distended, WBC 13.2K, CT showed rim-enhancing mass in L adnexa, mild R hydronephrosis; US pelvis showed L simple ovarian cyst, small amt FF in pelvis, confirmed R hydro noted to be new since surgery

Given concern for overall clinical picture, pt admitted to the hospital for observation and antibiotics.

TM, continued

POD#15/HD #1: Pain improved with narcotics only, worse with movement. Receiving doxycycline and metronidazole, WBC down to 10. CT IVP ordered given hydronephrosis.

CT IVP

“There is an extraluminal collection of contrast in the region of the distal right ureter with evidence of extravasation into the left lower pelvis. The contrast is streaming into the pouch of Douglas. ... [T]here is contrast opacification of the right ureter distal to this level ... indicating that this is likely a partial disruption...”
TM, continued

POD#15/0: Pt taken to OR by urology, stent successfully placed cystoscopically.

POD#16/1: Pt discharged home with improved pain.

1 wk later had Foley catheter removed, pain was almost completely resolved

6 wks postop stent was removed, CT IVP confirmed complete resolution of ureteral injury

References

References

References

References
Safe Laparoscopic Access

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Disclosure

I have no financial relationships to disclose.

Overview

- Patient Safety
- Ethical Framework
- History
- Safe Laparoscopic Access
- Potential Complications
- Cochrane Reviews
- Safe Access

Ethical Framework

- Autonomy
  - Voluntas aegroti suprema lex
  - Right to self-determination
- Beneficence
  - Salus aegroti suprema lex
  - Best interest of the patient
  - Concept of “healing” and doing good
- Non-maleficence
  - Primum non nocere
  - First do no harm
  - Double effect – combined effect of a balance between beneficence and non-maleficence
- Justice
  - Fairness and equality in the distribution of scarce resources

Cochrane Reviews

- Safe Access
Ethical Framework

- **Autonomy**
  - Voluntas aegroti suprema lex
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Harvard Medical Practice Study

- **Brennan et al NEJM 1991 Feb 7;324(6):370-6**
  - Prompted by increase in malpractice claims and payouts
  - Previous estimate inaccurate; based on voluntary reporting
  - 30,121 randomly selected records from 51 randomly selected acute care non-psych hospitals reviewed
  - “Adverse events” in 3.7% hospitalizations
    - 27.6% due to “negligence”
      - Including 6895 deaths and 877 cases of permanent and total disability
    - 70.5% resulted in disability lasting < 6 months
    - 2.6% resulted in permanently disabling injuries
    - Many of these patients had severe underlying disease

“Adverse Events”

- **How to define?**
  - Harvard MPS defined as “injury [] caused by medical management (not underlying disease) [] that prolonged hospitalization, produced a disability at the time of discharge or both.”
  - Derived from tort law (as was definition of negligence)
  - IOM defines “safety” as “freedom from accidental injury”
    - Kohn et al To err is human: building a safer health system Wash DC: Nat’l Academy Press; 1999

“Adverse Events”

“Adverse events do not, of course, necessarily signal poor quality care; nor does their absence necessarily indicate good-quality care.”

Brennan et al NEJM 1991 Feb 7;324(6):370-6

Negligence

- Defined as below standard expected of physicians in their discipline (and in their community)
- Expert physicians made determination
  - Sensitivity 89%
  - Reliability (kappa) 0.24
  - In sum – experts agreed that negligence was present but differed about extent of substandard care
- Crux of any tort litigation
Negligence

“All this underlines the fact that physicians find it difficult to judge whether a standard of care has been met – hardly a surprising fact in view of the complexity of clinical decision making.”

Types of Adverse Events

- In Harvard MPS
  - 48% were associated with an operation (within 2 weeks of surgery or if caused by surgery regardless of timing)
  - Less likely to be caused by negligence (17%) than nonsurgical AE’s (37%)
  - 19% were drug complications
  - 14% were wound infections
  - 13% were “technical complications”


Total Cost

- $4 billion (1989) dollars (6.5 billion today)
- ¼ out of pocket expense
- Fewer than 2% of patients with presumed negligent injuries filed a suit

Johnson et al The economic consequences of medical injuries: implications for a no-fault insurance plan JAMA 1992;267(18):2487-92

IOM report 1999

“To Err is Human”

- Extrapolated from Harvard MPS data
  - Estimated 44,000 - 98,000 preventable deaths each year in US caused by medical error
  - Harvard MPS replicated in following countries with similar results
    - Australia, NZ, UK, Denmark, France, Netherlands, Canada
  - Consensus: 10% of hospitalized patients experience a treatment-caused injury and at least 50% are preventable


Progress

- 1995 – 1999 – first studies of systems analysis in adverse drug events
  - Use of computerized physician order entry
  - Use of bar coding
  - Pharm on rounds in ICU
  - Role of sleep deprivation on medication errors

IOM report 1999
"To Err is Human"

- Huge headlines – first major push for patient safety since 1995
- Some say ended period of denial
- 2001 - Congress appropriated 50 million annually to Agency for Healthcare Research and Quality for patient safety research
- 2004 required that these funds be directed towards studies of information technology (cut off funding for other safety initiatives)

Reduction of Adverse Events

- Advances in medical knowledge
  - "Safe" drugs
  - Advances in surgical procedures/equipment
- Systems analysis
  - Identification of safe practices disseminated as practice guidelines or checklists
  - Learn from airlines/pilots, nuclear power, restaurants
- Aviation Safety Reporting System
- Institute for Nuclear Power Operations
- Education
  - Enforcement of practice guidelines and minimal standards for privileges

Systems Analysis

- Aviation Safety Reporting System (ASRS)
  - Created in 1976 in reaction to a 1974 TWA crash and subsequent near miss by United six weeks after.
  - ASRS allows pilots, flight attendants, mechanics and air traffic controllers to confidentially report incidents and near misses.
  - Reviewed and can result in safety bulletins disseminated to the industry as a whole.
  - Open for research analysis on the internet.
- Institute for Nuclear Power Operations (INPO) created after three mile island and promulgated training regulations for nuclear power personnel
  - Significant decrease in AE’s
  - Increase in productivity

Anesthesia

- First medical specialty to champion patient safety as a specific focus as early as 1978
  - 47 interviews; 359 preventable accidents were described
  - Human error in 82% of preventable accidents
  - Equipment failure in 14%
  - Error of commission vs. omission: 59/41
- Anesthesia Patient Safety Foundation formed 1985
  - Multidisciplinary
  - Electronic monitoring in 1980’s with development of minimal safe monitoring practices
  - Extended residency to three years
- Simulation
  - 10 to 20-fold reduction in mortality and catastrophic morbidity for healthy patients undergoing routine anesthetics

ICU’s and Checklists

Provonost Checklist

- Line placement
  - Wash hands with soap
  - Clean the patient’s skin with chlorhexidine antiseptic
  - Put sterile drapes over the entire patient
  - Wear a sterile mask, hat, gown, and gloves
  - Put a sterile dressing over the catheter site once the line is in
- Nurses observed x 1 month; MD’s skipped at least one step 1/3 of time
- Next month, nurses stopped MD’s if they skipped a step
  - Ten-day line-infection rate decreased from 11% to 0
  - Follow-up 15 months – only one line infection
  - Checklist had prevented forty-three infections and eight deaths, and saved two million dollars in costs
Barriers to Reduction of Adverse Events

- Encourage reporting
  - Survey data – MDs want to communicate about errors but find current systems inadequate
    - Garbutt et al Lost Opportunities: How Physicians Communicate About Medical Errors Health Affairs, 27; no.1 (2008):246-255

- Changes to legal system
  - Tort law

Progress

- Institute for Healthcare Improvement
  - 100,000 lives campaign – reduction in mortality for 122,000 patients
  - 5 million lives campaign
    - Included the Surgical Care Improvement Project – to date has not shown clinically significant reduction in post-operative infections.
      - Stulberg et al Adherence to Surgical Care Improvement Project Measures and the Association with Postoperative Infections JAMA 2010;303(24):2479-2485

- JCAHO
  - Unannounced accreditation audits
  - National Patient Safety Goals
    - Work hours (2003)
  - ACGME
    - Define competencies for each specialty
  - Continuing evaluation of practicing physicians

Specific Adverse Events

- Hospital acquired infections
  - CDC estimates 1.7 million hospitalized patients acquire an infection
    - 126,000 are caused by resistant staph
    - 99,000 are fatal
      - www.cdc.gov/HAI/pdfs/hai/infections_deaths.pdf

- Obstetrics

Systems Analysis

- Airline Industry
- Nuclear Power
- Restaurants
  - Leape Error in Medicine JAMA 1994;272:1851-7
Overview

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FDA data – Trocar Insertion Complications

- Trocar insertion accounts for 40% of laparoscopic complications (and most fatalities not anesthesia related)
- Fatalities
  - Cause of death
    - Unrecognized bowel injury
    - Major Vessel Injury
      - Included aorta, IVC, iliac vessels, iliac artery and vein
  - Type of procedure
    - Cholecystectomy, diagnostic laparoscopy, tubal, apy, LND

Potential Complications – Small Bowel Injury

Potential Complications – Small Bowel Injury with Optical Trocar

Potential Complications – Aortic Injury

Robotic Repair Aortic Injury
Potential Complications – Inferior Epigastric Injury

Potential Complications – Gastric Perforation

Potential Complications - Hernia

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Cochrane Review 2012

- 28 randomized controlled trials
- Studies were small, some excluded patients with previous abdominal surgery or those with raised BMI
- No difference or advantage between methods in terms of preventing major vascular or visceral complication
- Advantage of open-entry over Veress – failed entry
- Advantage of direct-entry over Veress – failed entry, extraperitoneal insufflation, omental injury
- Direct entry was described as a safer technique
- STEP trocar decreases trocar site bleeding
- Advantage to NOT lifting abdominal wall before Veress insertion

Cochrane Review 2008

- 17 randomized controlled trials
- 3040 laparoscopic surgeries
- No difference or advantage between methods in terms of preventing major complications
- Advantage of direct over Veress – failed entry, extraperitoneal insufflation
- STEP trocar decreases trocar site bleeding
- Advantage to NOT lifting abdominal wall before Veress insertion
- Ahmad et al. Laparoscopic entry techniques
  Cochrane Database Syst Rev. 2008 Apr 16;(2):CD006583

SOGC Guidelines

- Left upper quadrant entry
  - suspected or known periumbilical adhesions, history or presence of umbilical hernia, three failed insufflation attempts at the umbilicus (II-2 A)
  - Other sites of insertion (transuterine Veress CO₂ insufflation) may be considered if the umbilical and LUQ sites have failed or have been considered and are not an option (II-2 A)
  - Veress needle safety tests or checks not necessary (II-1 A)
  - VIP-pressure ≤ 10 mm Hg is a reliable indicator of correct intraperitoneal placement of the Veress needle (II-1 A)
  - Elevation of anterior abdominal wall at the time of Veress or primary trocar insertion not routinely recommended (II-2 B)
  - Angle of the Veress needle insertion should vary according to the BMI of the patient, from 45 degrees in non-obese women to 90 degrees in obese women (II-2 B)
  - High intraperitoneal (HIP-pressure) laparoscopic entry technique does not adversely affect cardiopulmonary function in healthy women (II-1 A)
  - Direct insertion of the trocar without prior pneumoperitoneum is safe alternative to Veress needle technique (II-2)
  - Direct insertion of the trocar is associated with less insufflation-related complications such as gas embolism, and it is a faster technique than the Veress needle technique (II-2)
  - Vilos et al. Laparoscopic entry: a review of techniques, technologies and complications
    J Obstet Gynaecol Can. 2007 May;29(5):433-65

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Veress Checklist

Pre-entry

- Proper Positioning
  - Arms tucked
  - Table flat and functioning (test Tbird)
  - Grounded
- Proper sterile prep and drape
- All equipment functioning properly and on field
  - Test monopolar bipolar
  - Test camera/light/video system
  - Test CO₂, ensure tanks full
  - Necessary equipment available in room (specific to operation)
- Anesthesia
  - Adequate relaxation
  - NG/OG tube

Entry and Post-entry

- Elevate abdominal wall
- Inclined appropriate for eventual trocar insertion
- LUQ if suspicion of umbilical adhesions or hernia; after 2 failed attempts at umbilicus
- CO₂ attached to Veress at low flow
- 45° angle of insertion
- Modified to 90° if obese
- VIP pressure ≤ 10 mmHg at entry
- Increase to high flow and establish pneumoperitoneum
- Full abdominal scan after camera entry
- Full abdominal scan before change in patient position and proceed with case
Open Checklist

Pre-entry
- Proper Positioning
  - Arms tucked
  - Table flat and functioning (test Tbird)
  - Gowned
- Proper sterile prep and drape
- All equipment functioning properly and on field
  - Test monopolar / bipolar
  - Test camera / light / video system
  - Test CO2, ensure tanks full
  - Necessary Equipment available in room (specific to operation)
- Anesthesia
  - Adequate relaxation
  - NG/OG tube

Entry and Post-entry
- Incision adequate for visualization
- Direct visualization of abdominal fascia
- Kocher clamps on fascia
- Incision made through fascia
- Elevate peritoneum and incise
- "Finger sweep"
- Stay sutures
- Full abdominal scan after camera entry
- ensure no injury before change in patient position and proceed with case

Major Vascular Injury Checklist

- Call for Vascular Surgery Immediately (substantial delay found in Baggish study)
- Midline Incision
- Sponge stick – apply pressure, do not clamp
- Type and Cross 6 U PRBC / 2 FFP
- Massive Transfusion Protocol
- Send CBC, Pt, Fibrinogen, Split products
- Instruct Anesthesia to call for assist
- Instruct OR personnel call for assist
- Assign one circulator to run stats/records


References
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.

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