Learning Objectives

At the end of this presentation, the learner should be able to:

- Describe characteristics of an enhanced recovery pathway for GYN surgery.
- List several reasons why implementation of an ERAS pathway is beneficial to the patient and health system.
- Explain the steps necessary to implement an ERAS pathway at their institution.
What is ERAS?
A collection of best anesthesia and surgical practices bundled into one pathway.

Is Enhanced Recovery Possible In GYN?

Implementing a structured Enhanced Recovery After Surgery (ERAS) protocol reduces length of stay after abdominal hysterectomy

Lena Wilin, Karin Franzen, Olle Lynggren, Kerstin Nilsson
First published: 13 June 2014

Results
Length of stay was significantly reduced in the study population after introducing the ERAS protocol from a mean of 2.8 (SD 1.1) days to a mean of 2.3 (SD 1.2) days (p = 0.011). The proportion of patients discharged at 2 days was significantly increased from 56% pre-ERAS to 79% after ERAS (p < 0.012). No differences were found in complications (5% vs. 3.5% in primary stay, 12% vs. 15% within 30 days after discharge), reoperations (2% vs. 1%) or readmission (4% vs. 4%).

HOT TOPIC!

Conference Report
Society of Gynecologic Oncology 2016 Annual Meeting: Highlights and context

4. Theme #3: surgical innovation
4.1. Enhanced recovery after surgery for gynecologic malignancies
At this year's surgical innovation session, Professor Olle Lynggren took us through his 15 year journey with implementing an evidence-based, multimodal perioperative care protocol (the "enhanced recovery pathway," ERP) for colon surgery in Sweden. This became the flagship protocol of the Enhanced Recovery After Surgery (ERAS®) Society upon its foundation in 2010. ERP interventions designed to reduce surgical stress, maintain normal physiological function postoperatively, and enhance mobilization after surgery have consistently been shown to decrease length of hospital stay, complication rates and the cost of care [19].
PREOP Counseling  
Bowel Prep  
Carb Load  
Consents

SURGERY Multimodal Analgesia  
Regional/Neuraxial Blocks  
Opioid Sparing  
GDF  
Minimally Invasive Surgery

RECOVERY Multimodal Analgesia  
Early Oral Nutrition  
Early Mobilization  
Defined milestones  
Transition Planning

Each Step Has It’s Own Benefit.
- Associated with LOS < 5 days (OR, 1.26; 95% CI, 1.15-1.38)
- Associated with lower SSI (OR, 0.46; 95% CI, 0.36-0.59)
- Improved insulin resistance and indices of patient comfort.
- Improves process flow and delays on day of surgery.

Each Step Has It’s Own Benefit.
- Reduced duration of ileus, reduced overall opioid consumption.
- Possible effects in reducing PACU discharge and Surgery-Extubation time.
- Associated With LOS < 5 Days (OR, 1.24; 95% CI, 1.12-1.38) and reduced complications (OR, 0.68; P < 0.003)
Less insulin resistance, lower nitrogen losses, reduced loss of muscle strength. Reduces rates of UTI, pneumonia, and ileus. Patient involvement in decision making and expectations for hospital course. Prescribed and ordered protocols to ensure properly timed events.

Each Step Has It's Own Benefit.

**Assessment** | **Participants** | **Evidence** | **Summary** |
--- | --- | --- | --- |
Surgical LOS | 3740 (11 studies) | Low | Mean 2.44 days lower |
Total LOS | 855 (7 studies) | Moderate | Mean 2.39 days lower |
Readmissions | 1325 (11 studies) | Moderate | 3 fewer per 1000 |
Complications | 1910 (13 studies) | Low | 139 fewer per 1000 |
Bowel Recovery | 1355 (6 studies) | Moderate | 1.02 days sooner |
Mortality | 1362 (9 studies) | Low | 9 to 0 fewer per 1000 |

ERAS Provides a Way to Include Quality Measures into Your Practice

- Surgical site infection reduction
- Opioid Stewardship
- Standardized Ambulation Protocols
- Standardized Discharge/Early Home Health Care Screening

Problem: Surgical Site Infections

- Ertapenum to Cefazolin/Metronidazole
  - Broader coverage for Clostridium Difficile
  - IT Support included reminders for redosing on Anesthesia EMR
  - Antibiotic Protocol was spearheaded during ERAS initiative

Cost savings estimated to ~$126,000 annually

Reduced SSI savings?

Making the Change

The University of Alabama Birmingham Experience
This is the amount of time researchers have said that it takes for basic research to be incorporated into clinical practice.

**What is 17 Years?**

---

**John Kotter’s 8 Steps to Manage Change**

- Establish a sense of urgency
- Create a guiding coalition
- Develop a vision and strategy
- Communicate the change vision
- Empower employees for broad-based action
- Generating short-term wins
- Consolidate gains and produce more change
- Anchor new approaches in the culture

---

**Why Don’t We Change?**

90% of Us are in the Top 10%

---
Our Patient Experience is Limited.

Recognize Barriers

A Qualitative Study to Understand the Barriers and Enablers in Implementing an Enhanced Recovery After Surgery Program

However, major barriers were identified, including the need for patient education, increased communication and collaboration, and better evidence for ERAS interventions. Identifying these barriers and enablers is the first step toward successfully implementing an ERAS program.

UAB Survey of Barriers

<table>
<thead>
<tr>
<th>Category</th>
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</table>
Getting institution support is KEY

- Identify Clinical Champions
- Identify Executive Champions
- Identify Key Players

DEVELOP A VISION AND STRATEGY

CREATE A GUIDING COALITION

82 Evidence Based Steps Identified

GENERATING SHORT-TERM WINS

<table>
<thead>
<tr>
<th>Quick Win Initiative(s)</th>
<th>Context</th>
<th>Owner (In Bold &amp; Team)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement Esmo trial</td>
<td>-EDAC and implement Esmo trial</td>
<td>Joan Closhy</td>
</tr>
<tr>
<td>Standardize OR room temperature</td>
<td>-Get recommendations from Dr. Canas</td>
<td>Boxen Vellingberg</td>
</tr>
<tr>
<td>Penum availability</td>
<td>-3 for penum availability for prophylactic administration</td>
<td>Boxen Vellingberg</td>
</tr>
<tr>
<td>ERAS scheduling for laparascopy</td>
<td>-Follow a standard process from clinic</td>
<td>Dr. Strang &amp; Erin Sample</td>
</tr>
<tr>
<td>Local infusions vs. TAP block</td>
<td>-Prescribe midazolam &amp; Ketamine</td>
<td>Dr. Carson</td>
</tr>
<tr>
<td>Clarification of nonkey planning order &amp; had placement in pump &amp; MACT</td>
<td></td>
<td>Betty Lindsey &amp; Annette Chambers</td>
</tr>
</tbody>
</table>
Enlist IT Support!

- Management requires some type of measurement
  - Benchmarks
  - Metrics
  - Goals
  - Data

ESTABLISH A SENSE OF URGENCY

<table>
<thead>
<tr>
<th>ERAS Elements</th>
<th>Definition/Elements/Parameters</th>
<th>Documentation Source</th>
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</thead>
<tbody>
<tr>
<td>Preoperative Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prophylactic antibiotic administration</td>
<td>% of patients that receive prophylactic antibiotic</td>
<td>PACT ERAS documentation - dept.</td>
</tr>
<tr>
<td>Preoperative bowel preparation</td>
<td>% of patients that receive appropriate bowel preparation</td>
<td>Clinic documentation of prescriptions. The NSQIP uses results file as well, it might be a potential documentation source. Another option would be to the prop. chloride which is very general and can be specific.</td>
</tr>
<tr>
<td>Preoperative intravenous sedation</td>
<td>% of patients receiving any intravenous sedation</td>
<td>Proc. note; &quot;IPA, Intravenous Sedation Procedure&quot;</td>
</tr>
<tr>
<td>Preoperative anesthesia</td>
<td>% of patients receiving any general anesthesia</td>
<td>Proc. note; &quot;IPA, Intravenous Sedation Procedure&quot;</td>
</tr>
</tbody>
</table>

ESTABLISH A SENSE OF URGENCY

Fig. UTERINE & ADNEXA PROCEDURES FOR NON-MALIGNANCY EXCEPT LEIOMYOMA
How Is A Patient Identified For ERAS?

Initially, all patients in the ERAS protocol will be identified by the surgeon.

When Does Anesthesia Become Involved?

The PACT will be the point of first contact between Anesthesia and ERAS patients. Patient education will be provided via personal consult, handouts or educational video. PACT faculty or resident will consent the patient for single shot spinal. Preop medications will be ordered by surgery.

Safety First!

Patients in the ERAS protocol will be identified with pink door placards.

The ERAS concept has been used in Europe since 2001 with roots in Sweden.
How Do You Get Buy In?

Continuous Pressure

- You are the light!
- Faculty Meetings
- Presentations
- Email Education
- C-Suite Presentations

ANCHOR NEW APPROACHES IN THE CULTURE
New and developing ERAS

- The process begins again, but with some of the heavy lifting already done.

CONSOLIDATE GAINS AND PRODUCE MORE CHANGE

- Create a coalition (executive and clinical leadership)
- Enlist IT support
- Empower the staff
- Recognize your institution's culture
- Educate and Communicate
- Seek quick wins for buy-in
- Build on success
Evaluation and Management of Pelvic Organ Prolapse

Alicia C. Ballard, MD
Assistant Professor Division of Urogynecology and Pelvic Floor Reconstructive Surgery
Department of OB/GYN
University of Alabama at Birmingham
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This presentation is designed to present evidence-based best practices within the field of Female Pelvic Medicine and Reconstructive Surgery, with the goal of improving outcomes for patients with pelvic organ prolapse. Our goal is to provide the highest standard of care in the prevention and treatment of pelvic floor disorders.

**Objective 1: Acquire and understand knowledge about:**
- The normal anatomic supports of the vagina, rectum, bladder, urethra and uterus
- (or vaginal cuff), including the bony pelvic, pelvic floor nerves and musculature
- and connective tissue.
- The alterations in normal anatomic relationships associated with pelvic floor relaxation
- Identification of the anatomic defects and terminology associated with various aspects of pelvic support disorders
- The principal etiologies of pelvic support defects
- The symptoms that may be experienced by a patient with pelvic support defects
- The impact prolapse has on a woman’s health related quality of life

**Objective 2: Develop patient history-taking, diagnostic, and management-planning knowledge including:**
- The ability to obtain a pertinent history in a patient with a suspected pelvic floor defect
- The ability to perform a focused physical examination utilizing the Pelvic Organ Prolapse Quantification (POP-Q) system to identify and characterize specific pelvic support defects, including:
  - Anterior compartment
  - Urethral hypermobility
  - Posterior compartment
  - Apical compartment (cervix/uterus or vaginal cuff)
- Knowledge regarding management of pelvic support defects nonsurgically (pelvic floor exercise regimens, pessary) and surgically
- The ability to consider and explain surgical options for pelvic organ prolapse accounting for the patient’s age, medical condition, surgical history and functional status
- Understanding considerations related to preoperative, intraoperative, and postoperative care
Objective 3: Be able to demonstrate understanding of

- The indications, benefits, risks and limitations of the following non-surgical treatments:
  - a. Pessary fitting
  - b. Pelvic floor exercise/ Pelvic floor physical therapy
- The ability to describe the accepted indications and risk as well as the patient centered outcomes for the following procedures for prolapse:
- Reconstructive Repairs:
- Transvaginal
  - a. Anterior and posterior colporrhaphy
  - b. Enterocoele repair
  - c. Perineorrhaphy
  - d. Transvaginal colpopexy (uterosacral, sacrospinous)
- Abdominal
  - a. Open, laparoscopic or robotic sacrocolpopexy
- Obliterative repairs
  - a. Colpocleisis
- Identify surgical complications of prolapse surgery
- Identify evidence-based research on synthetic and non-synthetic materials used in the operative management of pelvic floor prolapse
- Identification of patients who would benefit from referral to a specialist

Selected References


Pre-Pregnancy Tune-Up: Predicting Success and Avoiding Liability

G. Wright Bates, Jr., M.D.
Professor and Director, Reproductive Endocrinology and Infertility
Department of Obstetrics and Gynecology
University of Alabama at Birmingham
gbates@uabmc.edu
Pre-Pregnancy Tune-Up: Predicting Success and Avoiding Liability

Educational Objectives

- Participant will be able to describe pre-pregnancy counseling and lifestyle modification
- Participant will be able to describe optimization of natural fertility
- Participant will be able to describe the history and age based evaluation
- Participant will be able to describe appropriate genetic screening prior to pregnancy
- Participant will be able to provide overview of fertility treatment options

Outline

1. Lifestyle and Reproductive Health
   - Weight
   - Diet
   - Exercise
   - Smoking Cessation
   - Medication and Supplements

2. Optimizing Fertility
   - Age
   - Sexual Activity
     i. Coital practices
     ii. Frequency
     iii. Lubricants
   - Fertility Window

3. Potential Pre-Pregnancy Evaluation
   - Thyroid Function
   - Ovarian Reserve
   - Unnecessary Testing

4. Pre-pregnancy genetic screening
   - Carrier screening
   - Fragile X
   - PGS / PGD
5. Fertility Treatment Options

- Timing
- Lifestyle Modification
- Surgery
  - Laparoscopy
  - Hysteroscopy
  - Laparotomy
- Ovulation Induction / Super-Ovulation
- In Vitro Fertilization

Select References

- Optimizing Natural Fertility: A Practice Committee Opinion. American Society for Reproductive Medicine: Fertil Steril 2015;100(3)
- Microarrays and Next-Generation Sequencing Technology: The Use of Advanced Genetic Diagnostic Tools in Obstetrics and Gynecology. ACOG Committee Opinion Number 682, December 2016
- Perinatal Risks Associated With Assisted Reproductive Technology. ACOG Committee Opinion Number 671, September 2016
- Identification and Referral of Maternal Genetic Conditions in Pregnancy. ACOG Committee Opinion Number 643, October 2015
- Ovarian Reserve Testing. ACOG Committee Opinion Number 618, January 2015
- Primary Ovarian Insufficiency in Adolescents and Young Women Committee Opinion Number 605, July 2014
Utilizing pelvic ultrasonography to aid in the diagnosis of challenging gynecologic conditions

Mamie McLean, MD
Assistant Professor
Division of Reproductive Endocrinology and Infertility
University of Alabama at Birmingham
Progress 2017

Educational Objectives
Participants will be able to describe guidelines for a complete pelvic ultrasound
Participants will be able to discuss considerations for surgical intervention and expectant management of adnexal masses
Participants will be able to describe practice guidelines for saline sonohysterography
Participants will be able to discuss indications for saline sonography and its use in operative planning
Participants will be able to discuss utilization of pelvic sonography to facilitate diagnosis in pregnancy of unknown location

Outline
1. Evaluation of adnexal masses
   a. AIUM guidelines for pelvic ultrasonography
   b. Considerations for expectant management vs surgery
      i. Impact of management on fertility
2. Evaluation of abnormal uterine bleeding
   a. AIUM guidelines for sonohysterography
      i. Utilization for operative planning
3. Pregnancy of unknown location
   a. Role of pelvic sonography in diagnosis

Select References


