Are your choices for postsurgical pain putting your patients at increased risk?

MILLIONS OF WOMEN ARE EXPOSED TO OPIOIDS AFTER SURGERY EACH YEAR

- Surgical procedures for women are among the most frequently performed
  - Cesarean section (C-section) ranks #1 of all surgical procedures
  - Four of the most common ambulatory surgeries are performed on women
  - Hysterectomy, ligation of fallopian tubes, and oophorectomy all rank within the top 15 surgical procedures
- Almost 2 million women a year are exposed to the potential risks of opioids for postsurgical pain after C-section and hysterectomy
- Of the nearly 5 million total gynecological and obstetric surgeries performed each year, other common procedures that can lead to postsurgical pain for women include incontinence and prolapse surgeries, oophorectomy, and sterilization

WOMEN ARE AT GREATER RISK OF LONGER-TERM OPIOID USE

Share of Opioid Prescriptions by Gender, 2016

65% Women
35% Men

Women are prescribed almost 2x as many opioids as men

- In an analysis of surgical procedures performed on both males and females, 40% more women became newly persistent users of opioids
- Women’s higher rates of opioid dependence may be due to differences in body fat, metabolism, and hormones

HIGH RATES OF OPIOID PRESCRIBING AFTER SURGERY CAN LEAD TO RISKS MANY PATIENTS WOULD PREFER TO AVOID

99% of US patients undergoing surgery, including gynecologic surgery, have received opioids to manage postsurgical pain

1 in 15 patients prescribed an opioid for postsurgical pain will go on to long-term use

89% of patients who recently had surgery said they were concerned about opioid side effects, addiction, or dependence

79% of recent surgical patients said they preferred a non-opioid pain management option

*According to a retrospective study of hospital discharge data (N=37031).
†According to a prospective, longitudinal study (N=109). Preoperative opioid use, self-perceived risk of addiction, and depression were each independent predictors of prolonged (6 months) opioid use after surgery.
‡From a survey of 500 adults in the US who had an orthopedic or soft tissue surgery and 200 US surgeons who perform these procedures.
Exposure to opioids during cesarean section and hysterectomy can be an unintended gateway to long-term opioid use

**WOMEN ARE PRESCRIBED THE GREATEST NUMBER OF OPIOIDS REGARDLESS OF AGE**

- Women 40 to 59 years old received the greatest number of opioid prescriptions overall, almost twice as many as their male counterparts.

**WOMEN OVER 40 ACCOUNT FOR THE HIGHEST PERCENTAGES OF CESAREAN SECTIONS AND HYSTERECTOMIES**

**CESAREAN SECTION**

- Cesarean section has one of the highest rates of postsurgical opioid use
  - Over 1.2 million cesarean sections are performed each year in the United States.
  - Cesarean section is one of the 3 surgical procedures with the highest percentage of opioid-naïve patients who were discharged with a dose of opioids greater than or equivalent to 60 mg of morphine.
  - 75% of women who underwent cesarean section reported keeping unused pills at home, leaving a substantial number of pills for potential misuse and diversion.
  - Opioid use during breastfeeding: In infants who were breastfed, oxycodone and codeine led to greater CNS depression when compared to acetaminophen alone (P<0.0001; P<0.05, respectively).
  - Between one-quarter and one-half of patients undergoing cesarean section may choose not to use opioids following discharge.

**HYSTERECTOMY**

- Women 40 to 59 years old have the highest rate of hysterectomies, and they are at a particularly high risk of opioid use and misuse.
  - Approximately 600,000 hysterectomies are performed each year in the United States.
  - Up to 32% of hysterectomy patients are affected by chronic pelvic pain, which can put them at a higher risk for persistent opioid use.
  - 58% of hysterectomies are still performed as open surgeries—meaning larger incisions, longer healing, and a greater amount of opioids prescribed.
  - After surgery, about 13% of women 40 to 59 years old become newly persistent opioid users who continue to use opioids 3 to 6 months after surgery.

**Middle-aged women also have the highest rate of death due to opioid overdose among women**
THERE IS A LINK BETWEEN LEVELS OF ACUTE AND CHRONIC POSTSURGICAL PAIN IN OBSTETRIC/GYNECOLOGIC SURGERY, CALLING FOR EFFECTIVE POSTSURGICAL PAIN MANAGEMENT

ACUTE POSTSURGICAL PAIN
Postoperative day 1 (POD 1) scores vary depending on procedure type, with pain from open surgery being significantly higher than with laparoscopy ($P<0.01$)$^{20}$

<table>
<thead>
<tr>
<th>Surgery</th>
<th>Mean POD 1 pain score</th>
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<tbody>
<tr>
<td>Cesarean section</td>
<td>6.14</td>
</tr>
<tr>
<td>Hysterectomy</td>
<td></td>
</tr>
<tr>
<td>Open</td>
<td>5.79</td>
</tr>
<tr>
<td>Laparoscopic</td>
<td>4.44</td>
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</tbody>
</table>

CHRONIC POSTSURGICAL PAIN (CPSP)
Patients with more severe acute postsurgical pain are at an increased risk for developing CPSP$^{21}$

<table>
<thead>
<tr>
<th>Surgery</th>
<th>CPSP</th>
</tr>
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<tbody>
<tr>
<td>Cesarean section$^{22}$</td>
<td>15% at 3 months; 11% at 12 months</td>
</tr>
<tr>
<td>Hysterectomy$^{16,23}$ (including leiomyoma indications)</td>
<td>9% to 32% at 12 months</td>
</tr>
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RELIANCE ON OPIOIDS FOR POSTSURGICAL PAIN CONTROL CAN IMPACT RECOVERY, LENGTH OF STAY (LOS), AND PATIENT SATISFACTION

STUDIES SHOW:

- 69% of women experienced decreased libido with long-term intrathecal opioid use$^{24}$
- 100% of women taking intrathecal opioids for ~1 to 2 years developed amenorrhea or irregular menstrual cycles$^{21}$
- 17%-20% incidence of CNS depression in breastfed infants with maternal exposure to codeine and oxycodone, respectively$^{15}$
- ↓2 days: median LOS can be reduced from 3 days to 1 day after gynecologic surgery with opioid-reducing approach$^{25}$

HEALTHCARE PROVIDERS AND ORGANIZATIONS FOCUSED ON WOMEN’S HEALTH ARE WORKING TO SHIFT THE STANDARD OF CARE FOR PAIN MANAGEMENT TOWARD MULTIMODAL ANALGESIA

- Society for Gynecologic Oncology (SGO) stresses optimizing non-opioid methods of pain control, while maintaining accessibility of opioids to those who will benefit$^{26}$
- The use of enhanced recovery after surgery (ERAS) protocols, which include the use of multimodal analgesia, has been shown to increase same-day discharge rates after gynecologic surgery$^{27}$
Choose opioid-reducing strategies to enhance recovery after gynecologic surgery

MULTIMODAL APPROACHES WITH OR WITHOUT ERAS PROTOCOLS HAVE DEMONSTRATED BENEFITS IN GYNECOLOGIC SURGERIES

THE SGO AND ERAS® SOCIETIES SUPPORT THE USE OF OPIOID-MINIMIZING PAIN MANAGEMENT STRATEGIES AFTER GYNECOLOGIC SURGERIES

“...The gynecologic oncology community must continue to advocate at the state and national level that all regulations be evidence-based and take into account not only the goal of reducing opioid misuse, but also the imperative…to optimize availability and use of non-opioid methods of pain control.”

—2016 SGO Clinical Practice Statement

“Therefore, an enhanced recovery pathway for gynecological surgery must employ a strategy to effectively control postoperative pain and allow attainment of other ERAS targets such as early mobilization and return to oral diet whilst reducing the need for opiates.”

—2016 ERAS Guidelines—Part II

Protocol implementation can positively impact recovery

- 91% of patients discharged on POD 1
- 98% of patients with ambulation (>2 times) on POD 2
- ~50% decrease in complications

Local analgesic infiltration directly targets pain at its source and is not associated with major side effects

Local anesthetic field blocks can effectively provide regional anesthesia in abdominal surgeries

New modalities, along with long-lasting local analgesic pain control, can reduce the need for opioids when used as part of a multimodal pain management approach

References: