

SUPPLEMENTAL DIGITAL CONTENT
APPENDIX 1. LITERATURE SEARCH STRATEGY

ACOG CLINICAL CONSENSUS NUMBER 1
Pharmacologic Stepwise Multimodal Approach for Postpartum Pain Management

Database: Ovid MEDLINE(R) 1946 to April Week 4 2021 (searched May 4, 2021)
All searches were limited to human, English, and 2000-present

Line	Search	Results
1	Postpartum Period/ or postnatal care/ or (postpart\$ or post-part\$ or postnat\$ or post-nat\$).ti.	62531
2	pelvic pain/ or *pain/ or dyspareunia/ or pain measurement/ or pain, postoperative/ or pain\$.ti.	273853
3	1 and 2	756
4	pain/dt, th or pelvic pain/dt, th or Pain, Postoperative/dt, th or exp Analgesics/ or pain management/ or exercise therapy/ or exp physical therapy modalities/ or analgesics, opioid/ or codeine/ or Anti-Inflammatory Agents, Non-Steroidal/ or exp complementary therapies/ or exp prescription drugs/ or analgesia/ or exp drug therapy/ or Acetaminophen/ or Morphine/ or exp morphine derivatives/ or hydromorphone/ or Fentanyl/ or Tobramycin, Dexamethasone Drug Combination/ or Dexamethasone/ or Dexamethasone Isonicotinate/ or Gabapentin/ or Nerve Block/ or exp anesthetics, local/	2334098
5	analges\$.ti. or (opioid\$ or nsaid\$ or nonpharmacol\$ or non-pharmacol\$ or parenteral analges\$ or acetaminophen or tylenol or paracetamol or stepwise or step wise or morphine or hydromorphone\$ or fentanyl or dexamethasone or gabapentin or multimodal\$ or neuraxial opioid\$ or transversus abdominis plane block\$).ti,ab. or (pain adj3 (manage\$ or therap\$)).ti. or (local\$ adj3 (anesth\$ or anaesth\$)).ti,ab. or wound infiltrat\$.ti,ab.	399273
6	4 or 5	2500476
7	1 and 6	4787
8	pelvic pain/ or dyspareunia/ or pain measurement/ or pain, postoperative/ or pain/ or pain\$.ti,ab.	664462
9	7 and 8	505
10	3 or 9	935
11	limit 10 to (english language and humans)	791
12	limit 11 to yr="2000 -Current"	605

Vaginal Delivery

Line	Search	Results
13	Delivery, Obstetric/ or (Delivery, Obstetric/ and vaginal\$.ti.) or (vaginal\$ adj3 (deliver\$ or childbirth\$ or birth)).ti,ab.	42272
14	8 and 13	2305
15	6 and 14	867
16	Postpartum Period/ or postnatal care/ or (postpart\$ or post-part\$ or postnat\$ or post-nat\$).ti,ab.	176640
17	15 and 16	224
18	limit 17 to (english language and humans and yr="2000 -Current")	171

Cesarean Delivery

Line	Search	Results
19	exp Cesarean Section/ or (cesarean\$ or caesarean\$ or cesarian\$ or caesarian\$ or c-section\$).ti.	47556
20	16 and 19	4819
21	(postcesarean\$ or postcaesarean\$ or postcesarian\$ or postcaesarian\$ or post-cesarean\$ or post-caesarean\$ or post-cesarian\$ or post-caesarian\$).ti,ab.	1079
22	20 or 21	5706
23	6 and 22	1042
24	limit 23 to (english language and humans and yr="2000 -Current")	697

Breastfeeding and Other Postpartum Pain Management

Line	Search	Results
25	Breast Feeding/ or lactation/ or milk, human/ or (breastf\$ or breast feed\$ or breast fed or lactation or lactating).ti.	90877
26	2 or 6	2643132
27	25 and 26	5705
28	16 and 27	1258
29	limit 28 to (english language and humans and yr="2000 -Current")	514
30	12 not (18 or 24 or 29)	408

Background – Disparities, Pain Measurement, and Caregiving

Line	Search	Results
31	healthcare disparities/ or health status disparities/ or racism/ or prejudice/ or ethnic groups/ or minority groups/ or cultural competency/ or ethnic groups/ or minority groups/ or race relations/ or african continental ancestry group/ or african americans/ or exp american native continental ancestry group/ or asian continental ancestry group/ or asian americans/	292722
32	((bias or prejudice or racism or racist) and (unconscious\$ or implicit\$ or insitutional)).ti,ab.	1691
33	(implicit bias or prejudice or racism or racist or disparit\$ or african american\$ or afro-american\$ or asian american\$ or native american\$ or alaska native\$ or american indian\$).ti,ab. or black\$.ti.	151352
34	31 or 32 or 33	368889
35	3 and 34	6
36	pain measurement/ or (visual analog scale\$ or numerical rating scale\$ or numerical rating pain scale\$ or wong-baker or faces pain scale or mcgill pain scale or color analog scale or mankowski pain scale or brief pain inventory or descriptor differential scale or pain scale\$ or pain measur\$ or coping scale\$ or coping inventor\$ or COPE Inventory or Carver Brief or Coping Self-Efficacy Scale or Brief Resilient Coping Scale or Proactive Coping Inventory or Dyadic Coping Inventory).ti,ab.	110039
37	3 and 36	230
38	Caregivers/ or (childcare or caregiving or care giving).ti,ab.	45362
39	((ability adj3 care*) or ((care* or caring) adj3 child*) or ((carry* or lift*) adj3 (baby* or babies* or infant* or newborn*))) or ((care\$ or caring) adj3 (baby* or babies* or infant* or newborn*))).ti,ab.	57293
40	38 or 39	96448

	economic[ti] OR structural[ti] OR material[ti] OR African American*[tiab] OR Black[ti] OR Black American*[tiab] OR Hispanic*[tiab] OR Latino*[tiab] OR Latina*[tiab] OR Latinx[tiab] OR Asian American*[tiab] OR poverty[tiab] OR disparit*[tiab] OR urban[tiab] OR rural[tiab] OR vulnerable[tiab] OR underserved[tiab] OR ((bias[tiab] or prejudic*[tiab] or racis*[tiab]) AND (unconscious*[tiab] or implicit*[tiab] or institutional*[tiab] or structural*[tiab] or dismantl*[tiab])) OR ((social*[tiab] or socio-economic[tiab] or socioeconomic[tiab] or economic[tiab] or structural[tiab] or material[tiab]) AND (advantage*[tiab] or disadvantage*[tiab] or exclude*[tiab] or exclusion[tiab] or include*[tiab] or inclusion[tiab] or status[tiab] or position[tiab] or gradient*[tiab] or hierarch*[tiab] or class*[tiab] or determinant*[tiab]))	
22	#5 AND #21	438
23	#22 OR #20	511
24	#23 AND #6	103
25	#23 AND #6 from 2000 - 2021	102

General Considerations for Postpartum Pain Management

RECOMMENDATION STATEMENTS

- Obstetrician-gynecologists and other obstetric health care professionals should be familiar with safe and effective pharmacologic and non-pharmacologic therapies for postpartum pain management.
- Obstetrician-gynecologists and other obstetric health care professionals should engage in shared decision-making with individuals regarding their preferences for pain management; doing so may improve satisfaction, decrease opioid use, and potentially reduce misuse and diversion.
- Obstetrician-gynecologists and other obstetric health care professionals should be aware of inequities in the assessment and treatment of pain and consider ways in which their own biases may contribute to perpetuating them.
- Obstetrician-gynecologists and other obstetric health care professionals should use a stepwise multimodal approach using a combination of agents with different mechanisms of action to effectively individualize pain management in the postpartum period.
- NSAIDs may be used for the management of postpartum pain in all individuals, including those with hypertensive disorders of pregnancy.

SUPPORTING EVIDENCE

Related Guidelines

American College of Obstetricians and Gynecologists (ACOG) Practice Bulletin 203: Chronic Hypertension in Pregnancy 2019 Nonsteroidal anti-inflammatory medications should continue to be used preferentially over opioid analgesics; however, women with chronic hypertension theoretically may require intensification of blood pressure monitoring and regimen adjustments when on these medications.

American College of Obstetricians and Gynecologists (ACOG) Statement of Policy on Racial Bias 2017 ACOG is committed to addressing racial bias and discrimination and their impact on our patients.

American College of Obstetricians and Gynecologists (ACOG) Committee Opinion 649: Racial and Ethnic Disparities in Obstetrics and Gynecology 2015 Recommendations provided for all obstetrician-gynecologists and other women's health care providers to reduce racial and ethnic disparities in health and health care.

American College of Obstetricians and Gynecologists (ACOG) Commitment to Changing the Culture of Medicine & Eliminating Racial Disparities in Women's Health Outcomes ACOG is committed to eliminating disparities in women's health and to confronting implicit and explicit bias and racism. This means recognizing and examining our own prejudice and bias and addressing the way in which health care systems perpetuate inequality.

American Society of Anesthesiologists (ASA) 2012 Whenever possible, anesthesiologists should use multimodal pain management therapy. Dosing regimens should be administered to optimize efficacy while minimizing the risk of adverse events. The choice of medication, dose, route, and duration of therapy should be individualized.

World Health Organization (WHO) 1986 Overview of cancer pain management and methods for relief of cancer pain.

Category I

Systematic Reviews and Meta-Analyses:

Lee 2019 demonstrates the presence of racial disparities in analgesia use for the management of acute pain in US Emergency Departments.

Wuytack 2016 found in women who are not breastfeeding and who sustained perineal trauma, NSAIDs (compared to placebo) provide greater pain relief for acute postpartum perineal pain and fewer women need additional analgesia when treated with a NSAID; however, overall quality of the evidence was low.

Chou 2013 found more women experienced pain relief, and fewer had additional pain relief with paracetamol compared with placebo, although potential adverse effects were not assessed and generally the quality of studies was unclear.

Meghani 2012 quantifies the magnitude of analgesic treatment disparities in subgroups of minorities; the treatment gap does not appear to be closing with time or existing policy initiatives.

Randomized Controlled Trials:

Carvalho 2019 found having a choice compared with no choice routine care did not reduce oxycodone requirements or pain scores.

Blue 2018 found first-line use of ibuprofen rather than acetaminophen for postpartum pain did not lengthen the duration of severe-range hypertension in women with preeclampsia with severe features.

Vigil de Garcia 2017 shows ibuprofen significantly elevates blood pressure in women with severe pre-eclampsia during the postpartum period.

Category II

Mullman 2020 found an enhanced recovery after surgery (ERAS) approach for the cesarean delivery population is associated with improved outcomes including decreases in opioid use, length of stay, and costs.

Smith 2019 found a multimodal stepwise approach to post-cesarean delivery pain control was associated with markedly reduced opioid consumption without increasing hospital stay or median pain scores.

Badreldin 2019 found Hispanic and non-Hispanic Black women experience disparities in pain management in the postpartum setting that cannot be explained by less perceived pain.

Johnson 2019 identified racial and ethnic inequities in the experience, assessment and treatment of postpartum pain.

Anastasio 2018 found nonsteroidal anti-inflammatory drug administration to postpartum patients with hypertensive disorders of pregnancy is not associated with a change in blood pressure or requirement for antihypertensive medication.

Prabhu 2017 found a shared decision-making approach to opioid prescribing after cesarean delivery was associated with approximately a 50% decrease in the number of opioids prescribed postoperatively in this cohort compared with the institutional standard prescription.

Bateman 2017 found the amount of opioid prescribed after cesarean delivery generally exceeds the amount consumed by a significant margin, leading to substantial amounts of leftover opioid medication.

Viteri 2017 found NSAIDs were not associated with increased rates of persistent postpartum hypertension.

Komatsu 2017 found there is clinically significant variability between healthy nulliparous parturients in the pain experience, opioid use, and functional recovery after childbirth following vaginal and cesarean delivery; recovery to predelivery function

Category III

Carvalho 2019 noted standardized one-size-fits-all postoperative pain management protocols do not account for the significant variability in pain and analgesic requirements amongst women after cesarean delivery; by pre-operatively identifying patients at risk of developing severe pain, clinicians may be able to optimize care by offering personalized, stratified or targeted analgesic treatment protocols.

Hirshberg 2018 is an editorial on safety of NSAID use in women with preeclampsia.

Sutton 2017 summarized that multimodal analgesia should include neuraxial morphine in conjunction with nonopioid adjuncts with additional opioids reserved for severe breakthrough pain.

Carvalho 2017 summarized the delivery of effective postoperative analgesia for women undergoing cesarean delivery.

Leung 2012 concluded different levels of pain severity and chronicity necessitate different analgesic platforms of management, and the clinician should move up or down the appropriate platform to explore the various treatment options as per the status and needs of the patient.

is similar after vaginal and cesarean delivery, and approximately half of the variance was explained by pain burden.

Hoffman 2016 findings suggest that individuals with at least some medical training hold and may use false beliefs about biological differences between Black and White individuals to inform medical judgements, which may contribute to racial disparities in pain assessment and treatment.

Wasden 2014 found NSAIDs did not appear to increase the average postpartum mean arterial pressures, increase the requirement for anti-hypertensive medications, or increase the rate of adverse postpartum events in women with severe hypertensive disorders of pregnancy.

Eisenach 2008 found cesarean delivery does not increase the risk of persistent pain and postpartum depression; the severity of the acute pain response to childbirth predicts morbidity, suggesting the need to more carefully address pain treatment in the days following childbirth.

Declercq 2008 found substantial proportions of mothers reported problems with postpartum pain; women experiencing a cesarean section, or an assisted vaginal delivery were most likely to report that the pain persisted for an extended period.

Stepwise Approach: Vaginal or Cesarean Birth

Vaginal Birth

RECOMMENDATION STATEMENT

- A stepwise, multimodal approach to analgesia beginning with an NSAID or acetaminophen and, if needed, escalating to an opioid is recommended after vaginal delivery.

SUPPORTING EVIDENCE

Related Guidelines

Mills 2019 Long-term opioid use often begins with the treatment of acute pain. When opioids are started, clinicians should order the lowest effective dosage and prescribe no greater quantity of opioids than needed for the expected duration of such pain severe enough to require opioids. When starting opioid therapy, clinicians should prescribe immediate-release opioids instead of extended-release or long-acting opioids. This is especially important on the day of discharge. Clinicians and hospital administration should consider implementing a protocol for opioid prescribing for patients with uncomplicated normal spontaneous vaginal delivery during and after delivery.

Category I

Category II

Category III

Systematic Reviews and Meta-Analyses:

East 2020 found there is limited very low-certainty evidence that may support the use of cooling treatments, in the form of ice packs or cold gel pads, for the relief of perineal pain in the first two days following childbirth; it is likely that the concurrent use of several treatments is required to adequately address the issue, including prescription and non-prescription analgesia.

Hedayati 2005 found evidence for the effectiveness of topically applied local anaesthetics for treating perineal pain is not compelling; there has been no evaluation for the long-term effects of topically applied local anaesthetics.

Bateman 2016 found a very small proportion of opioid-naïve women (approximately 1 in 300) become persistent prescription opioid users following cesarean delivery; preexisting psychiatric comorbidity, certain pain conditions, and substance use/abuse conditions identifiable at the time of initial opioid use prescribing were predictors of persistent use.

Valentine 2015 found scheduled acetaminophen after cesarean delivery results in decreased opioid use and more consistent acetaminophen intake compared to acetaminophen administered as needed via combination acetaminophen-opioid analgesics, without compromising analgesia.

Sutton 2017 summarized that multimodal analgesia should include neuraxial morphine in conjunction with nonopioid adjuncts with additional opioids reserved for severe breakthrough pain.

Fahey 2017 noted the effective management of pain is a critical component of the care provided to women in the postpartum period.

Yoon 2016 noted although APAP hepatotoxicity follows a predictable timeline of hepatic failure, its clinical presentation might vary, N-acetylcysteine (NAC) therapy is considered as the mainstay therapy, but liver transplantation might represent a life-saving procedure for selected patients.

Khan 2011 noted adjuvant analgesics are an essential tool in cancer pain; however, they are rarely adequate analgesics when used alone for cancer pain, and a typical clinical situation would involve the use of an opioid and an adjuvant together.

Mounsey 2011 reviewed treatment options for internal and external hemorrhoids.

Sostres 2010 summarized the risk of upper gastrointestinal complications varies, depending on the presence of one or more risk factors.

Cesarean Birth

RECOMMENDATION STATEMENT

- For postoperative cesarean pain, a stepwise multimodal approach should include standard oral and parenteral analgesic adjuvants such as acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs), and opioids.

SUPPORTING EVIDENCE

Related Guidelines

American College of Obstetricians and Gynecologists (ACOG) Committee Opinion 711: Opioid Use and Opioid Use Disorder in Pregnancy 2017 Recommendations provided for all health care providers to take an active role in combatting opioid use and to screen for substance use; access to adequate postpartum psychosocial support services, including substance use disorder treatment and relapse prevention programs, should be made available.

Category I

Systematic Reviews and Meta-Analyses:

Ng 2019 found preoperative IV paracetamol has convincingly demonstrated useful opioid-sparing effects and it also appears safe for use at the time of delivery.

Kerai 2017 found administration of opioids still remains the gold standard for post-operative analgesia, but the associated troublesome side effects have led to the mandatory incorporation of non-opioid analgesics in post-CS analgesia regime.

Champaneria 2016 found TAP block provides effective analgesia after cesarean section; however, additional benefits of TAP block are more difficult to demonstrate when long acting intrathecal opioids are administered.

McNicol 2015 provides moderate to low quality evidence that patient-controlled analgesia (PCA) is an efficacious alternative to non-patient controlled systemic analgesia for postoperative pain control.

Randomized Controlled Trials:

Ituk 2019 found the addition of intravenous dexamethasone 8 mg to a multimodal postoperative analgesic regimen that included intrathecal morphine, in women who had a cesarean delivery under spinal anesthesia, did not reduce 24-hour postoperative opioid consumption.

Teigen 2019 found enhanced recovery after surgery (ERAS) was not associated with an increase in the number of women discharged on postoperative day 2, but that may have been related to factors other than patients' medical readiness for discharge.

Gustafson 2018 found abdominal binders may be associated with improved postoperative pain scores but did not affect postoperative hemorrhage.

Ghana 2017 found patients who received abdominal binders reported less pain, lower SDS scores, and higher hemoglobin and hematocrit levels following cesarean delivery.

Cardoso 2013 found dexamethasone reduced the cumulative incidence of nausea and vomiting after cesarean section under

Category II

Mullman 2020 found an enhanced recovery after surgery (ERAS) approach for the cesarean delivery population is associated with improved outcomes including decreases in opioid use, length of stay, and costs.

Smith 2019 found a multimodal stepwise approach to post-cesarean delivery pain control was associated with markedly reduced opioid consumption without increasing hospital stay or median pain scores.

Nanji 2019 suggests that routine administration of intra-operative intravenous dexamethasone 4 mg does not provide additional analgesic benefit after scheduled cesarean delivery, in the context of a multimodal postoperative analgesic regimen.

Nanji 2019 found split doses of oxycodone were associated with 56% reduction in 48 hours opioid use after cesarean delivery.

Holland 2019 found eliminating routine ordering of oral opioids after cesarean delivery is associated with a significant decrease in opioid consumption while maintaining the same levels of pain control and patient satisfaction.

Kleiman 2019 found implementation of enhanced recovery after surgery (ERAS) protocols for elective cesarean delivery is associated with significant improvements in analgesic and recovery outcomes.

Valentine 2015 found scheduled acetaminophen after cesarean delivery results in decreased opioid use and more consistent acetaminophen intake compared to acetaminophen administered as needed via combination acetaminophen-opioid analgesics, without compromising analgesia.

Category III

Mitchell 2019 noted current available evidence supports that peripheral nerve blocks for cesarean delivery offers the greatest benefit in cases where standard multimodal analgesia with neuraxial morphine cannot be given.

Landau 2019 noted tailored approaches, including prolonged epidural catheterization and multimodal adjuvants with adequate monitoring, remain essential until further studies determine whether neuraxial opioids provide analgesia for buprenorphine-maintained patients.

Lavand'homme 2018 noted patient and healthcare provider education on reported pain and well tolerated analgesic use is the key to improve postpartum pain management after cesarean section.

Sutton 2017 summarized that multimodal analgesia should include neuraxial morphine in conjunction with nonopioid adjuncts with additional opioids reserved for severe breakthrough pain.

Mukhtar 2009 reviewed TAP block technique; more recently ultrasound guided TAP block has been described with promises of better localization and deposition of the local anaesthetic with improved accuracy.

Pan 2006 is an editorial on multimodal approach for post cesarean delivery pain management.

spinal anaesthesia with morphine and lowered pain scores on the first postoperative day.

Eslamian 2012 found two-sided TAP block with 0.25% bupivacaine in parturients who undergo cesarean section with a Pfannenstiel incision under general anesthesia can decrease postoperative pain and analgesic consumption.

Lavand'homme 2007 found continuous intrawound infusion of diclofenac after elective cesarean delivery demonstrates a greater opioid-sparing effect and better postoperative analgesia than the same dose administered as an intermittent intravenous bolus.

Breastfeeding Considerations

RECOMMENDATION STATEMENTS

- Acetaminophen and ibuprofen are first-line analgesics for postpartum pain for individuals intending to provide breast milk to their infant.
- Intravenous ketorolac is an acceptable component of postpartum multimodal therapy for individuals intending to provide breast milk to their neonates; although information about medication levels in breast milk is not available for intravenous ketorolac, they are likely low in the immediate postpartum period.
- Obstetrician-gynecologists and other obstetric health care professionals should counsel individuals who are prescribed opioid analgesics about the risk of central nervous system depression in the individual and the breastfed infant.
- If a codeine-containing medication is selected for postpartum pain management, duration of therapy and neonatal signs of toxicity should be reviewed with individuals and their families.

SUPPORTING EVIDENCE

Related Guidelines

Crews 2012- Clinical Pharmacogenetics Implementation Consortium (CPIC) Guidelines It is important to consider the effects of codeine and its metabolites, including morphine, in breastfed infants.

Madadi 2009- Motherisk Guidelines Central nervous system depression in the baby appears to worsen after 4 days, probably owing to the accumulation of morphine with more breastfeeding. If possible, codeine should not be used for longer than 4 days. If pain still necessitates codeine, an attempt should be made to decrease the dose or to switch to non-codeine painkillers (eg, NSAIDs). Women who convert more codeine to morphine have a duplication of the gene encoding for cytochrome P4502D6. This genetic predisposition can be detected by genetic test. This test, although not available in most hospitals, is available on the market. Although codeine is widely used in North America, 9 randomized studies comparing the use of codeine with various NSAIDs in laparotomy cases (eg, abdominal surgery) failed to show codeine to be superior in pain relief.

Category I

Category II

Category III

Bateman 2017 found the amount of opioid prescribed after cesarean delivery generally exceeds the amount consumed by a significant margin, leading to substantial amounts of leftover opioid medication; lower opioid prescription correlates with lower consumption without a concomitant increase in pain scores or satisfaction.

Rigourd 2014 found the transfer of ibuprofen into breast milk decreases with the protein concentration and the duration of lactation.

Kelly 2013 found the only cases of central nervous system depression among neonates occurred when the length of codeine use exceeded the guideline recommendations.

Lam 2012 found oxycodone is not a safer alternative to codeine in breastfed infants.

Kirchheiner 2007 found ultrarapid codeine metabolism caused by a CYP2D6 gene duplication resulted in a 1.5-fold higher morphine exposure compared to extensive metabolizers.

Wischnik 1989 data suggests ketorolac has very favorable pharmacokinetic properties regarding potential transfer to the infant in maternal milk.

National Library of Medicine 2020 (Drugs and Lactation (LactMed) Database) notes milk levels of ketorolac are low with the usual oral dosage, but milk levels have not been measured after higher injectable dosages or with the nasal spray; ketorolac injection is used for a short time (typically 24 hours) after cesarean section in some hospital protocols with no evidence of harm to breastfed infants.

National Library of Medicine 2018 (Drugs and Lactation (LactMed) Database) notes ibuprofen is a preferred choice as an analgesic or anti-inflammatory agent in nursing mothers because of its extremely low levels in breastmilk, short half-life and safe use in infants in doses much higher than those excreted in breastmilk.

National Library of Medicine 2018 (Drugs and Lactation (LactMed) Database) notes acetaminophen is a good choice for analgesia, and fever reduction in nursing mothers. Amounts in milk are much less than doses usually given to infants; adverse effects in breastfed infants appear to be rare.

US FDA 2018 restricts use of prescription codeine pain and cough medicines and tramadol pain medicines in children; recommends against use in breastfeeding women.

Hendrickson 2012 noted using the lowest effective analgesic dose for the minimum time needed for pain control should minimize the modest risk.

Koren 2006 described a fatal infant case with above average codeine serum concentration; whatever clinical approach is taken, codeine cannot be considered as a safe drug for all infants during breastfeeding.

Ilett 2005 noted there are few occasions when breastfeeding is contraindicated because of maternal drug ingestion; most drugs are safe, with the proviso that the infant should always be observed closely. Nevertheless, maternal drug use during lactation should always be considered as an individual risk-benefit analysis.

Discharge Considerations

RECOMMENDATION STATEMENT

- Obstetrician-gynecologists and other obstetric health care professionals should engage in shared decision-making with individuals regarding pain management after hospital discharge, incorporating pharmacologic interventions that may include opioids.
- Duration of opioid use should be limited to the shortest reasonable course expected for treating acute pain.

SUPPORTING EVIDENCE

Category I

Systematic Review:

Kerai 2017 found administration of opioids still remains the gold standard for post-operative analgesia, but the associated troublesome side effects have led to the mandatory incorporation of non-opioid analgesics in post-CS analgesia regime.

Category II

Prabhu 2017 found a shared decision-making approach to opioid prescribing after cesarean delivery was associated with approximately a 50% decrease in the number of opioids prescribed postoperatively in this cohort compared with the institutional standard prescription.

Bateman 2017 found the amount of opioid prescribed after cesarean delivery generally exceeds the amount consumed by a significant margin, leading to substantial amounts of leftover opioid medication; lower opioid prescription correlates with lower consumption without a concomitant increase in pain scores or satisfaction.

Valentine 2015 found scheduled acetaminophen after cesarean delivery results in decreased opioid use and more consistent acetaminophen intake compared to acetaminophen administered as needed via combination acetaminophen-opioid analgesics, without compromising analgesia.

Category III