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WOMEN'S HEALTH CARE PHYSICIANS

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The Academy of Breastfeeding Medicine; the American College of Nurse-Midwives; the Association of Women's Health, Obstetric and Neonatal Nurses; the Society for Maternal–Fetal Medicine; the Society for Obstetric Anesthesia and Perinatology; and the Society of Obstetricians and Gynaecologists of Canada endorse this document. This Committee Opinion was developed by the American College of Obstetricians and Gynecologists' Committee on Obstetric Practice, in collaboration with the American College of Nurse-Midwives liaison member Tekoa L. King, CNM, MPH; American Academy of Family Physicians liaison member Beth Choby, MD; and committee member Yasser Y. El-Sayed, MD.

Postpartum Pain Management

ABSTRACT: Pain and fatigue are the most common problems reported by women in the early postpartum period. Pain can interfere with a woman's ability to care for herself and her infant. Untreated pain is associated with a risk of greater opioid use, postpartum depression, and development of persistent pain. Nonpharmacologic and pharmacologic therapies are important components of postpartum pain management. Because 81% of women in the United States initiate breastfeeding during the postpartum period, it is important to consider the drug effects of all prescribed medications on the mother–infant dyad. Multimodal analgesia uses drugs that have different mechanisms of action, which potentiates the analgesic effect. If opioids are included, a multimodal regimen used in a stepwise approach allows for administration of lower doses of opioids. Given interindividual variation in metabolism of opioids, as well as the risk of maternal and neonatal adverse effects in women who are ultra-rapid metabolizers of codeine, monitoring for excessive sedation and other adverse effects in infants is prudent for women who are prescribed opiates. Although the U.S. Food and Drug Administration recommendations underscore the need for anticipatory guidance regarding opioid effects in all patients, obstetrician–gynecologists and other obstetric care providers should ensure that the application of this guidance does not interfere with pain control or disrupt breastfeeding during the postpartum period. Women with opioid use disorder, women who have chronic pain, and women who are using other medications or substances that may increase sedation need additional support in managing postpartum pain.

Recommendations

The American College of Obstetricians and Gynecologists makes the following recommendations:

- Pain can interfere with a woman's ability to care for herself and her infant. Nonpharmacologic and pharmacologic therapies are important components of postpartum pain management.
- Because of the variation in types and intensity of pain women experience during the early postpartum period, as well as the concern that 1 in 300 opioid-naive patients exposed to opioids after cesarean birth will become persistent users of opioids, a stepwise approach using a multimodal combination of agents can enable obstetrician–gynecologists and other obstetric care providers to effectively individualize pain management for women in the postpartum period.
- For postoperative cesarean pain, standard oral and parenteral analgesic adjuvants include acetaminophen, nonsteroidal antiinflammatory drugs (NSAIDs), opioids, and opioids that are in combination formulations with either acetaminophen or an NSAID.
- Parenteral or oral opioids should be reserved for treating breakthrough pain when analgesia from the combination of neuraxial opioids and nonopioid adjuncts becomes inadequate.
- A shared decision-making approach to postpartum discharge opioid prescription can optimize pain control while reducing the number of unused opioid tablets.

- If a codeine-containing medication is the selected choice for postpartum pain management, medication risks and benefits, including patient education regarding newborn signs of toxicity, should be reviewed with the family.
- Regardless of the medication selected, it is prudent to counsel women who are prescribed opioid analgesics about the risk of central nervous system depression in the woman and the breastfed infant. Duration of use of opiate prescriptions should be limited to the shortest reasonable course expected for treating acute pain.

Introduction

Pain and fatigue are the most common problems reported by women in the early postpartum period. Pain can interfere with a woman's ability to care for herself and her infant. Untreated pain is associated with a risk of greater opioid use, postpartum depression, and development of persistent pain (1). A stepwise approach using a multimodal combination of agents (ie, the use of two or more pain medications that have different mechanisms of action) can enable obstetrician–gynecologists and other obstetric care providers to effectively individualize pain management for women in the postpartum period. This is important because of the variation in types and intensity of pain women experience during the early postpartum period, as well as the concern that 1 in 300 opioid-naive patients exposed to opioids after cesarean birth will become persistent users of opioids (2). Nonpharmacologic and pharmacologic therapies are important components of postpartum pain management. Because 81% of women in the United States initiate breastfeeding during the postpartum period, (3) it is important to consider the drug effects of all prescribed medications on the mother–infant dyad.

Stepwise, Multimodal Approach

In 1986, the World Health Organization (WHO) introduced a stepwise analgesic ladder for the treatment of cancer pain. This three-tier approach was the first attempt to treat pain by matching analgesic effectiveness to pain severity (4). This approach may be adapted for postpartum pain management. Step one includes nonopioid analgesics (eg, acetaminophen or nonsteroidal antiinflammatory drugs [NSAIDs]), step two adds milder opioids (eg, codeine, hydrocodone, oxycodone, tramadol, oral morphine), and step three incorporates stronger opioids (eg, parenteral morphine, hydromorphone, fentanyl). Opioids differ with regard to pharmacokinetic effects such as half-life, and active versus nonactive metabolites. In consideration of these pharmacokinetic properties, when pain cannot be adequately managed with step one nonopioid medications, milder, short-acting opioids are the preferred next options.

The WHO analgesic ladder is effective for managing cancer-related pain and has been widely adopted as a framework for noncancer pain despite a lack of robust evidence of effectiveness for treating acute noncancer pain (5). Nonetheless, the basic principle of the WHO analgesic ladder stepwise approach may be a useful framework for managing pain during the postpartum period so that opioids are used only when needed.

Since the introduction of the WHO analgesic ladder, the physiologic mechanisms of pain have become better understood, and new medications and techniques for treating pain have become available. It is now known that pain is multifactorial (5). Multimodal analgesia uses drugs that have different mechanisms of action, which potentiates the analgesic effect. If opioids are included, a multimodal regimen used in a stepwise approach allows for administration of lower doses of opioids (6, 7). Similarly, multidisciplinary enhanced recovery after surgery protocols for postcesarean management may contribute to shorter length of hospitalization (8). Three components that are commonly included in enhanced recovery after surgery protocols for postcesarean management are 1) early oral intake, 2) mobilization, and 3) removal of urinary catheter (8).

Vaginal Birth

The most common sources of pain in the first days after vaginal birth are breast engorgement, uterine contractions, and perineal lacerations. Nonpharmacologic treatments, such as cold packs and increasing the frequency of breastfeeding, are generally sufficient for managing breast engorgement associated with the onset of lactation. Mild analgesics that have an antiinflammatory effect can be used, if needed.

Management of nipple pain begins with a careful assessment of infant latch and, if the woman is expressing milk, the fit of pump flanges. Although anhydrous lanolin has historically been recommended for treatment of nipple pain or trauma, a systematic review did not find evidence that any specific topical treatment is superior to doing nothing or applying breast milk (9). Of note, a recent randomized controlled trial found that application of breast milk with the additional protection from a breast shield is more effective in healing trauma and mitigating pain than is application of lanolin, which must be wiped away before breastfeeding (10). The potential causes of persistent pain associated with breastfeeding are numerous, and a careful assessment of maternal and infant contributing factors is warranted (11).

Uterine cramping, or "afterpains," is more common in multiparous women and occurs most often during breastfeeding in the first postpartum days. Use of heating pads applied to the abdomen may relieve this discomfort. Nonsteroidal antiinflammatory medications are more effective than acetaminophen. The data on opioids for the relief of uterine cramping are inconclusive (12, 13).

Perineal pain can be treated with nonpharmacologic topical agents, topical anesthetics, or oral analgesics. The few studies that compared topical anesthetics did not find strong evidence that these agents reduce pain better than

placebo or decrease the use of additional analgesia (14). Ice packs or cold gel packs may be useful for reducing edema and numbing the perineum in the first 24 hours. There is only limited evidence to support the effectiveness of local cooling treatments (ice packs, cold gel packs, cold baths, or iced baths) applied to the perineum after childbirth to relieve pain. A meta-analysis found that cold packs applied for 10–20 minutes improved perineal analgesia 24–72 hours after birth (relative risk, 0.61; 95% CI, 0.41–0.91) compared with placebo (15).

Hemorrhoids can become edematous and traumatized due to pushing during the second stage of labor. Topical application of astringent, steroid, or anesthetic creams may improve hemorrhoidal symptoms by inducing vasoconstriction, decreasing edema, or ameliorating itching, respectively. Despite widespread use of these agents, no randomized trials have demonstrated their effectiveness (16). Prolonged use of steroid cream should be avoided because of the atrophic effects these agents have on skin.

Most studies of oral analgesics for postpartum pain have evaluated medications with different modes of action to determine comparative effectiveness using a single-dose study methodology. A single dose of acetaminophen (500–1,000 mg) or an NSAID relieves pain better than placebo (17, 18). Although the evidence is not strong, NSAIDs appear to be more effective than acetaminophen at 4 hours after birth (relative risk, 1.54; 95% CI, 1.07–2.22), but there is no significant difference at 6 hours after birth (18). Because NSAIDs have an analgesic and antiinflammatory ceiling effect, increasing the dose does not improve analgesia and increases the risk of adverse effects (19–21). Nonsteroidal antiinflammatory drugs are associated with gastrointestinal complications such as dyspepsia, ulcer, and gastrointestinal bleeding, and may be associated with increased blood pressure, although recent data have questioned the association between NSAIDs and hypertension (22, 23).

When a standard dose of an NSAID is insufficient, a multimodal approach to analgesia that employs an NSAID, acetaminophen and, if needed, a milder opioid can be an appropriate next step. A lower opioid dose helps facilitate early ambulation, improves the woman's ability to care for the newborn, and minimizes drug transfer to breast milk. Many of the milder short-acting opioids are available in combination formulations that include acetaminophen. Most medications that combine an opioid and acetaminophen have a maximum dose of 325 mg of acetaminophen per tablet, which ensures that the standard daily dosage (two tablets administered every 4–6 hours) will not exceed the 3–4 grams maximum daily dose of acetaminophen. Achieving multimodal analgesia using an NSAID and acetaminophen given simultaneously on a set schedule, with a milder opioid added only if needed, is preferred over acetaminophen–opioid combinations. Scheduled delivery versus as needed (PRN) results in decreased opioid use and consistent analgesia (24, 25).

Stronger opioid analgesics (eg, intravenous morphine, hydromorphone, fentanyl) are best reserved for women with inadequate pain control after a reasonable trial of a standard dosage of a multimodal regimen of NSAIDs combined with milder opioids. Stronger opioids should be used only as long as absolutely needed for adequate analgesia. A stepwise approach supports moving from stronger opioids to milder opioids as part of a multimodal regimen, administered on a regular basis, as soon as possible depending on the individual woman's needs. Adverse effects of opioids can be particularly problematic during the early postpartum period. Opioid-induced constipation can exacerbate perineal pain. Drowsiness from opioid use can interfere with maternal activities of daily living such as infant care and feeding (12).

Cesarean Birth

A stepwise, multimodal approach to analgesia management is also appropriate in the setting of cesarean birth. Neuraxial opioids provide the greatest postcesarean birth analgesia, but most women require additional analgesia because the effects of neuraxial opioids diminish (24). Standard oral and parenteral analgesic adjuvants include acetaminophen, NSAIDs, opioids, and opioids that are in combination formulations with either acetaminophen or an NSAID. Dexamethasone has been used in the perioperative period; a single preoperative dose of dexamethasone has been found to improve analgesia and decrease nausea and vomiting on the first postoperative day (24, 26).

Parenteral or oral opioids should be reserved for treating breakthrough pain when analgesia from the combination of neuraxial opioids and nonopioid adjuncts becomes inadequate. An oral route is preferred for opioids because parenterally administered opioids do not necessarily provide superior analgesia (27). Parenteral opioid administration should be reserved for women with persistent pain or those who cannot tolerate oral medications. If continued administration of parenteral opioids is required, patient-controlled analgesia is preferred because of greater analgesic efficacy and higher patient satisfaction (24, 28).

Women who undergo cesarean birth may benefit from local anesthetics delivered by wound infiltration or transversus abdominis plane block (24, 29, 30). A transversus abdominis plane block involves using a blunt-tip needle to inject 20–30 mL of anesthetic in the plane between the internal oblique and transversus abdominis muscles to target the peripheral nerves innervating the lower abdomen; the block can be done with ultrasound guidance (31).

Gabapentin is not recommended for routine postcesarean pain control given the lack of strong evidence for significantly improved cesarean postoperative pain as well as potential adverse effects and limited data on the neonatal safety profile. However, gabapentin may be

considered as part of a multimodal analgesic regimen in patients with a history of chronic pain or pain not relieved by standard treatment protocols (24).

Discharge Medications

Recent studies demonstrate that the amount of opioid prescribed after cesarean birth often exceeds the actual amount needed or consumed after discharge. The median number of dispensed opioid tablets was 40 (interquartile range, 30–40), the median number consumed was 20 (interquartile range, 8–30), and leftover was 15 (interquartile range, 3–26) (32). This raises cost and safety concerns regarding nonmedical use and diversion (32, 33). However, it is critical that pain control not be negatively affected by under prescribing. A shared decision-making approach to postpartum discharge opioid prescription can optimize pain control while reducing the number of unused opioid tablets (34). Although it is tempting to define a number of tablets or duration of therapy to achieve the balance of pain control and reducing the number of unused tablets, an "optimal" number of tablets or duration of therapy has not been identified. As a result, therapy should be individualized based on the patient's condition. Practitioners should be aware that standard order sets may have more pills than an individual needs and should also be familiar with applicable prescription drug monitoring programs.

Breastfeeding Considerations

Factors that affect drug transfer into breast milk include the lipophilic nature of the drug, the degree to which the drug binds to protein, the drug's bioavailability, the medication pKa (measure of acidity) and milk pH, the drug's molecular weight, the amount of breast milk consumed, and the timing of medication administration relative to breastfeeding episodes. Most drugs transfer into breast milk through diffusion. Breast milk is acidic relative to plasma, and drugs that are highly basic can be ionized in breast milk and sequestered. The *relative infant dose*, defined as the weight-adjusted maximum percentage of maternal dose in milligrams per kilogram (assuming that the maternal dosage is a standard therapeutic dose), is the measure most often used to assess drug safety during lactation. A relative infant dose greater than 10% of the maternal dose is generally concerning (35).

Nonsteroidal Antiinflammatory Drugs for Breastfeeding Women

There are no clear differences in analgesic efficacy between equipotent doses of different NSAIDs, however, the route of administration and pharmacokinetic properties affect onset of action and duration. Orally administered NSAIDs are excreted into breast milk in low concentrations. Ibuprofen has a short half-life with a relative infant dose that ranges from 0.6% in colostrum to less than 0.38% in mature milk, equivalent to approximately 0.2% of the pediatric dose (36). Given the very low concentrations in breast milk, ibuprofen use is acceptable (37, 38) and the likely preferred first-line agent for postpartum pain (37, 39, 40).

Injectable and oral forms of ketorolac are used to treat moderate pain in the immediate postpartum period in women for whom multimodal analgesia is indicated. The product labeling states this agent should be used with caution when administered to a nursing woman. Limited data suggest the estimated relative infant dose after oral administration is low at approximately 0.16–0.4% (41, 42). The relative infant dose after intravenous administration is not known but is likely low in the first days postpartum before the onset of copious milk production (lactogenesis II). Therefore, based on the effectiveness of ketorolac as a component of multimodal analgesia particularly after cesarean birth, and that ketorolac use would likely have little, if any, concentration in breast milk at this time, ketorolac is used in the immediate postpartum period when indicated for managing pain.

Opioids for Breastfeeding Women

Opioids possess several pharmacokinetic properties of consequence to breastfeeding women. Opioids are lipophilic, have a low molecular weight, and are generally weak bases, which are all properties that facilitate transfer into breast milk (43). Some opioids undergo conversion to potent metabolites that have a significant analgesic and sedative effect. For example, codeine has an active metabolite, which is morphine (44). For some opioids, the presence of multiple active and inactive metabolites complicates determination of exposure and effects (45).

Codeine and tramadol are metabolized to their active analgesic forms by *CYP2D6* (44). Pharmacogenetic differences in cytochrome P450 2D6 (*CYP2D6*) are known to cause higher or lower than expected plasma concentrations of opioid metabolites (46). There are several different polymorphisms in the genes that encode the CYP450 enzymes and, therefore, considerable individual variation in the amount and efficiency of these enzymes (47). The polymorphisms that involve duplication of this enzyme result in the individual being an "ultra-rapid metabolizer." For these individuals, typical doses of opioids metabolized by *CYP2D6* can result in high serum metabolite levels, which creates a risk that active metabolites will pass into breast milk (43, 48). There are several published case reports of breastfed infants with excessive sedation or depressed respirations in the setting of maternal codeine use as well as one report of an infant death (48, 49).

Polymorphisms of the genes encoding the CYP450 enzyme family are distributed differently among racial and ethnic groups. The population frequency of *CYP2D6* ultra-rapid metabolizers ranges from 0.5% in China to as high as 29% in Ethiopia (Fig. 1) (47, 50). In the United States, the prevalence of ultra-rapid metabolizers varies

Figure 1. Frequency (%) of *CYP2D6* poor metabolizers (bold) and ultrarapid metabolizers (italic) in different populations. (Reprinted from Cascorbi I. Pharmacogenetics of cytochrome p4502D6: genetic background and clinical implication. Eur J Clin Invest 2003;33[suppl 2]:17–22.)

but is, on average, approximately 4–5% (46, 47, 50). Conversely, approximately 6% of individuals in the United States are poor metabolizers, and, therefore, receive insufficient pain control with codeine. Given interindividual variation in rates of metabolism, empiric doses of codeine are associated with producing excessive sedation or insufficient pain relief.

On April 20, 2017, the U.S. Food and Drug Administration (FDA) issued a Drug Safety Communication that announced label revisions of all prescription medicines that contained codeine and tramadol. Among the label changes is a strengthened warning that breastfeeding is not recommended while using medicines that contain codeine or tramadol because of the potential for serious adverse effects in the infant due to opioid overdose (49). The FDA did not find any published reports of toxicity in breastfed infants after maternal use of tramadol. However, tramadol was included in the FDA advisory because it has pharmacologic properties that are similar to codeine, including metabolism through the *CYP2D6* pathway to produce analgesic effects.

Although not addressed in the FDA guidance, oxycodone and hydrocodone are also partially metabolized by *CYP2D6* to the more potent opioid metabolites oxymorphone and hydromorphone, respectively. After oxycodone administration, ultra-rapid metabolizers may experience more pronounced pain relief (51). Hydrocodone metabolism to hydromorphone also varies by *CYP2D6* activity (52). Because hydromorphone is not metabolized by *CYP2D6*, effects of the drug in breastfeeding mother–infant dyads are not influenced by maternal or infant *CYP2D6* genotype (53).

As with all opioids, morphine given intravenously or orally, as opposed to neuraxial administration, appears in higher amounts in breast milk. Once the woman's milk comes in, it is best to provide pain control with a nonopioid analgesic and limit maternal intake of morphine to the first few days at a low dosage with close infant monitoring if the infant is receiving the woman's breast milk (54).

Given interindividual variation in metabolism of opioids, as well as the risk of maternal and neonatal adverse effects in women who are ultra-rapid metabolizers of codeine, monitoring for excessive sedation and other adverse effects in infants is prudent for women who are prescribed opiates (55). The Motherisk Program at the Hospital for Sick Children in Toronto has published guidelines for monitoring lactating women and infants for central nervous system depression while using medications that contain codeine (Box 1). In a study of 238 breastfeeding women using these guidelines, neonatal sedation was reported in 2.1% of infants and was not associated with differences in genotype (55). These results suggest that such safety guidelines reduce the risk of neonatal sedation with maternal opioid use.

Although the FDA recommendations underscore the need for anticipatory guidance regarding opioid effects in all patients, obstetrician–gynecologists and other obstetric care providers should ensure that the application of this guidance does not interfere with pain control or disrupt breastfeeding during the postpartum period. The American College of Obstetricians and Gynecologists recommends that obstetrician–gynecologists and other obstetric care providers adopt the following two strategies to enable adequate pain control and continued breastfeeding if opioid analgesia is required:

1. If a codeine-containing medication is the selected choice for postpartum pain management, medication risks and benefits, including patient education regarding newborn signs of toxicity, should be reviewed with the family.
2. Regardless of the medication selected, it is prudent to counsel women who are prescribed opioid analgesics about the risk of central nervous system depression in the woman and the breastfed infant. Duration of use of opiate prescriptions should be limited to the shortest reasonable course expected for treating acute pain.

Additional strategies to encourage use of regional anesthetic techniques, NSAIDs, and acetaminophen can

Box 1. Motherisk Guidelines for Safe Use of Medications That Contain Codeine During Breastfeeding

In most cases, the occurrence of central nervous system depression is consistent between the mother and the baby. If the mother suffers from symptoms of central nervous system depression (eg, somnolence, grogginess), a physician should examine the baby for concomitant signs of central nervous system depression.

- If the baby is not feeding well, does not wake up to be fed, does not gain weight, or shows limpness, he or she should be examined by a physician.
- Central nervous system depression in the baby appears to worsen after 4 days, probably owing to the accumulation of morphine with continued 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 analgesics (eg, nonsteroidal antiinflammatory drugs).
- Women who convert more codeine to morphine have a duplication of the gene encoding for cytochrome P450 2D6. This genetic predisposition can be detected by a genetic test. This test, although not available in most hospitals, is available on the market.
- Although codeine is widely used in North America, nine randomized studies comparing the use of codeine with various nonsteroidal antiinflammatory drugs in laparotomy cases (ie, abdominal surgery) failed to show codeine to be superior in pain relief.

Reprinted from Madadi P, Moretti M, Djokanovic N, Bozzo P, Nulman I, Ito S, et al. Guidelines for maternal codeine use during breastfeeding. Can Fam Physician 2009;55:1077–8.

help minimize risk while providing adequate pain control for breastfeeding women (24).

Special Considerations

There is substantial individual variation in pain tolerance. Women with opioid use disorder, women who have chronic pain, and women who are using other medications or substances that may increase sedation need additional support in managing postpartum pain.

Opioid Use Disorder

Women with opioid use disorder need additional support and planning for pain management postpartum, which is addressed in more detail in ACOG Committee Opinion No. 711. Screening for substance use using validated screening tools, such as questionnaires (including 4 Ps, NIDA Quick Screen, and CRAFFT), should be a part of comprehensive obstetric care and should be done at the first prenatal visit in partnership with the pregnant woman. Women with substance use disorder should continue their opioid agonist pharmacotherapy throughout pregnancy and the postpartum period, although the dosage might need to be adjusted (56). The reader is referred to ACOG Committee Opinion No. 711 (56) for information about opioid agonist pharmacotherapy for women with opioid use disorder.

The postpartum period represents a time of increased vulnerabilities, and women with opioid use disorder relapse far more often in the postpartum period compared with during pregnancy (57). Triggers for relapse may include loss of insurance and access to treatment, demands of caring for the newborn, sleep deprivation, and threat of loss of child custody. Screening for postpartum depression should be routine, and assessment for other comorbid mental health conditions should be considered if there is a prior history or if concern exists (58, 59). Substance use and overdose are increasingly found to be major contributing factors to pregnancy-associated deaths (60, 61). Women with opioid use disorder should receive appropriate patient education, family education, or both, about the risks of opioid overdose and consideration of naloxone prescription in case of overdose (62).

Women With Chronic Pain

Women with chronic pain, particularly those using opioids for pain management, also represent a unique population that requires careful consideration during the postpartum period. Although beyond the scope of this document, management of chronic pain needs to be informed by the appropriate specialist consultations. The reader is referred to the Centers for Disease Control and Prevention's *Guideline for Prescribing Opioids for Chronic Pain—United States, 2016* (63) and the National Academy of Sciences' *Pain Management and the Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use* (64).

Conclusion

Pain and fatigue are the most common problems reported by women in the early postpartum period. Pain can interfere with a woman's ability to care for herself and her infant. Nonpharmacologic and pharmacologic therapies are important components of postpartum care. A stepwise, multimodal approach emphasizing nonopioid analgesia as first-line therapy is safe and effective for vaginal deliveries and cesarean deliveries. Opioid medication is an adjunct for patients with uncontrolled pain despite adequate first-line therapy. A shared decision-making approach to postpartum discharge opioid prescription can optimize pain control while reducing the number of unused opioid tablets.

For More Information

The American College of Obstetricians and Gynecologists has identified additional resources on topics related

to this document that may be helpful for ob-gyns, other health care providers, and patients. You may view these resources at www.acog.org/More-Info/PostpartumPain.

These resources are for information only and are not meant to be comprehensive. Referral to these resources does not imply the American College of Obstetricians and Gynecologists' endorsement of the organization, the organization's website, or the content of the resource. The resources may change without notice.

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