The Perils of Opioid Prescribing During Pregnancy

Marjorie Meyer, MD

KEYWORDS

• Pregnancy • Opioids • Chronic pain • Teratogens • Neonatal abstinence

KEY POINTS

- Chronic opioid therapy during periconception can result in congenital anomalies.
- Neonates exposed to chronic opioid therapy in utero are at risk for neonatal abstinence symptoms.
- Opioids kept in the home should be secured from children and teens in the household to prevent accidental poisoning or experimentation.
- Chronic opioid therapy during pregnancy requires a multidisciplinary approach with obstetrics, pain specialists, and pediatricians.
- Women planning pregnancy or not using reliable contraception should be on folic acid before conception.

IS PRESCRIBING OPIOIDS FOR CHRONIC PAIN PERILOUS FOR WOMEN?

Prescribing long-term opioid therapy to women has increased dramatically over the last decade, with the incidence of use as high as 10% in reproductive aged women in some health care systems.[1] This statistic makes it hardly surprising that prescribing of opioids during pregnancy has increased in a parallel fashion.[2] Despite limited evidence of efficacy of chronic opioid therapy for the types of pain most commonly reported in women,[3] clinicians will care for patients that become pregnant while taking opioids for chronic pain. The purpose of this article is to examine the perils of chronic opioid use in women in general, during pregnancy, and on the neonate.

RISK FOR MISPRESCRIPTION

Women have more pain than men. Although the cellular mechanisms underlying the sexual dimorphism of pain response remains unclear,[4] epidemiologic studies are consistent in the finding of increased chronic pain syndromes in women.[5] Women

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Fletcher Allen Health Care and the University of Vermont, 111 Colchester Avenue, Burlington, VT 05401, USA
E-mail address: Marjorie.meyer@uvm.edu

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receive more opioid prescriptions than men, have chronic use more frequently, and are prescribed higher doses.[3,6] A recent review by Darnall and colleagues[3] details the evidence available for common indications for opioid treatment in women. There is no evidence to support long-term opioid use for irritable bowel symptoms, headache, or fibromyalgia, and at best, mixed evidence of efficacy for musculoskeletal pain. Once opioid use has exceeded 90 days, two-thirds of patients are still taking these drugs years later.[7] Preexisting depression, anxiety, and smoking increase the risk of long-term opioid prescribing.[3] Of women entering a treatment program for prescription drug abuse, 62% received the initial prescription legitimately by a physician (as opposed to illegally); over half continued opioid use through legitimate prescription, but were more than twice as likely as men to have multiple prescribers.[8,9] Women who abuse prescription opioids are less likely to use opioids through a route other than orally (ie, less intravenous [IV] or intranasal use compared to men), but are more likely to use medication to modulate negative effect and psychiatric symptoms, as opposed to pain. Although some investigators suggest that opioids may play a role in the treatment of long-term multimodality pain and suffering,[7] this approach has not been rigorously tested or accepted and would be beyond the scope of the general practitioner.

Overall, these findings suggest that opioids prescribed by well-intentioned providers for poorly defined pain sets the stage for chronic, higher dose opioid use for modulation of negative effect, taking a toll on the women's life and family.[8,9]

RISK FOR MISUSE, ADDICTION, OR DEPENDENCE

The blurry lines between misuse, physical dependence, and addition have been simplified in the most recent Diagnostic and Statistical Manual of the American Psychiatric Association fifth edition.[10] Physical dependence has been defined as a state of adaptation that is manifested by a drug class–specific withdrawal syndrome produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist.[11] Historically, the physical symptoms associated with cessation of a drug (physical withdrawal) were differentiated from substance addiction or dependence, with the latter characterized by a specific preoccupation with a desire to obtain and take the drug and persistent drug-seeking behavior. The various definitions of dependence and addiction can explain why the prevalence of addiction in individuals prescribed opioids for long periods of time ranges from 0% to 50%. In the most recent DSM-5 substance use disorder, these characteristics have been combined. Regardless of definition, there is no evidence that women are more prone to misuse, dependence, or addition than men who are prescribed long-term opioid therapy; however, it is clear that for women seeking treatment for misuse, the negative impact on family, social life, and employment is greater than men with similar medical functional impairment.[8,9] Hence, another peril of prescribing chronic opioids to women: the sequelae of dependence or misuse are more severe than for men.

RISK FOR OVERDOSE

Between 1999 and 2007, the risk for unintentional opioid overdose–related death has increased by 124%.[12] Although men are more likely to die following an opioid-related overdose, hospitalization following prescription drug overdose has been higher for women (2009: 16,000/100, 000) than men (2009: 13,000/100000) since 1993 and escalating more rapidly.[6,13] In a predominantly male cohort,[12] there is a relationship between the dose and manner in which opioids are prescribed and the risk for