

Authors' contributions

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- Giroto LC. Preceptores do Sistema Único de Saúde: como percebem seu papel em processos educacionais na saúde. São Paulo: Faculdade de Medicina, Universidade de São Paulo; 2016. [dissertação][accessed on Oct 22, 2021]. Available on: http://fm.usp.br/cedem/conteudo/publicacoes/cedem_129_dissertacao_leticia_cabrini_giroto.pdf.
- Fernandes CR, Sousa RQ, Arcanjo FSA, et al. Implantação de residência em anestesiologia no interior do nordeste do Brasil: impacto nos processos de trabalho e na motivação profissional. *Rev Bras Anesthesiol.* 2015;65:155–61.

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Conflicts of interest

The authors declare no conflicts of interest.

References

- Sociedade Brasileira de Anestesiologia. Manual do instrutor de CET – SBA. Rio de Janeiro: SBA; 2020.
- Scheffer M, Cassenote A, Guerra A, et al. Demografia Médica no Brasil 2020. São Paulo: Departamento de Medicina Preventiva da FMUSP; CFM; 2020. [accessed on Oct 24, 2021]. Available on: https://www3.fm.usp.br/fmusp/conteudo/DemografiaMedica2020_9DEZ.pdf.
- Botti SHO, Rego STA. Docente-clínico: o complexo papel do preceptor na residência médica. *Phys Rev. Saúde Col.* 2011;21:65–85. [accessed on Nov 29, 2021]. Available on: <https://www.scielo.br/pdf/physis/v21n1/v21n1a04.pdf>.

The overshadowed opioid misuse pandemic



Dear Editor,

Our recent COVID-19 pandemic has overshadowed our long term prescribed opioid misuse pandemic, which is still alive and kicking. This old lethal pandemic should not be ignored and more needs to be done to deal with it. The USA Center for Disease Control and Prevention estimates that the total “economic burden” of prescription opioid misuse in the country is \$78.5 billion per year.¹ Furthermore, more than 100,000 people die each year from drug overdose in the USA.²

In the late 1990s, pharmaceutical companies reassured the medical communities that patients would not become addicted to prescription opioid pain medications, but there was widespread misuse of these medications before it became apparent that they are actually highly addictive.³ For instance, the incidence of opioid-related death in women has increased 5-fold over the past decade. For many women, their initial opioid exposure occurred in the setting of routine medical care. Approximately one in three deliveries in the USA are by cesarean section, and opioids are

commonly prescribed for postoperative pain treatment. A total of 0.36% of 80,127 opioid-naive women became persistent opioid users following their cesarean section.⁴ Now more than ever, it is important to identify and implement the most “opioid sparing” management for patients undergoing cesarean section.

At our institution, for over twenty years, we have provided epidural-PCA fentanyl with ropivacaine analgesia for 48 hours post-cesarean section pain management. In our retrospective study, we determined whether Epidural-PCA was necessary for an additional day, up to 72 hours post-cesarean section. One group of patients preferred to continue epidural-PCA fentanyl with ropivacaine analgesia for a total of 72 hours, while the second group of patients preferred having only epidural-PCA fentanyl with ropivacaine analgesia for 48 hours. Patients in both groups had the option to receive oxycodone 5 mg with acetaminophen 326 mg tablet, and ibuprofen 400 mg tablet every 4 hours as needed in addition. Patients in the group that received epidural-PCA for 72 hours post cesarean section did not require any oral opioids and evaluated their pain treatment satisfaction as 9.3 out of 10. In the group that received epidural-PCA for only 48 hours, 60% of the patients

regretted their decision to discontinue the epidural at 48 hours, and that group's average pain treatment satisfaction was 7.6 out of 10. These patients continued taking oral opioids following termination of epidural analgesia.⁵

Recently, in our institution, this technique was replaced by a much more commonly applied intrathecal morphine, as part of a recent trend in medicine to perform medical procedures that are more convenient for us or more expensive than a technique that is safer for our patients.



Intrathecal morphine along with local anesthetics and oral opioids are commonly provided for cesarean section patients with the risks of postoperative respiratory depression and persistent opioid misuse. Just one extra exposure to opioids can increase the risk of individuals becoming opioid misusers and/or suffering from prescribed opioid overdose. Additional studies are needed to determine exactly how many patients end up afflicted with opioid misuse after cesarean sections. However, we feel that even if just one life is lost because of prescription opioid overdose, it is one life too many. In the meantime, we advise healthcare providers to consider using epidural-PCA analgesia for post-cesarean section patients to decrease the risks associated with postoperative opioids. Choosing epidural-PCA analgesia over intrathecal morphine and oral opioids can save lives.

Conflicts of interest

The authors declare no conflicts of interest.

References

1. Florence CS, Zhou C, Luo F, et al. The economic burden of prescription opioid overdose, abuse, and dependence in the United States, 2013. *Med Care*. 2016;54:901–6.
2. Drug overdose deaths in the U.S. top 100,000 annually 2021 [Available from: https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2021/20211117.htm. accessed January 1 2022.
3. Morone NE, Weiner DK. Pain as the fifth vital sign: exposing the vital need for pain education. *Clin Ther*. 2013;35:1728–32.
4. Bateman BT, Franklin JM, Bykov K, et al. Persistent opioid use following cesarean delivery: patterns and predictors among opioid-naïve women. *Am J Obstet Gynecol*. 2016;215:353.e1–53.e18.
5. Levin D, Cohen S, Shah R, et al. Administration of epidural- PCA analgesia for third day post-cesarean section pain: a retrospective review. In: 59th Annual Meeting of New Jersey State Society of Anesthesiologists, New Brunswick, NJ; 2018.

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