

## Fracture healing and NSAIDs

The article by Taylor et al provided very limited data comparing use of analgesics and rates of nonunion.<sup>1</sup> It is pretty drastic to conclude that “patients should not be denied NSAIDs [nonsteroidal anti-inflammatory drugs] for short-term pain relief.”<sup>1</sup> In terms of fracture healing there is evidence in rodent studies that NSAIDs can slow healing.<sup>2-4</sup> A review article by Boursinos et al advised caution in using NSAIDs in patients with fractures.<sup>5</sup> As inflammation is the first step in the healing process, and given the range of choice of analgesics, there is no particular reason to recommend NSAIDs after a fracture.

—Christopher Lam MD CCFP  
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### Competing interests

None declared

### References

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## Guidelines for mild head injuries in children

We would like to reply to Dr Zemek’s letter<sup>1</sup> about the new Guidelines for Diagnosing and Managing Pediatric Concussion<sup>2</sup> and his reference to our clinical review of the office management of mild head injury in children and adolescents.<sup>3</sup>

We are very pleased that the theme of concussion in the pediatric population has been the focus of much attention recently at different levels and in different institutions and associations. Clear and readily available information about concussion is an obvious need that family physicians, emergency physicians, and pediatricians are currently facing.

Our recommendations and those of the guidelines follow each other very closely. The guideline recommendations are organized into 5 topics in tables at the beginning of the document. Clicking on the number automatically jumps to the details of each recommendation in this very extensive guideline.<sup>2</sup> Their topics include the following: “In advance (before the first activity)”; “On presentation (what are the ‘red flags?’)”; “On discharge (what do we tell parents and/or caregivers?)”; “On interim assessment (when can the child/adolescent return to learn/play?)”; and “On re-assessment after one month (what do we do next if the child/adolescent still has symptoms?).”<sup>2</sup>

The intention of our review was to provide practical, current approaches and specific tools for family physicians to help diagnose, manage, and provide information to families, teachers, and coaches. We appreciate that the guidelines advocated by Dr Zemek have a similar purpose, which is to equip physicians with updated information to facilitate their work to identify patients suffering from concussion and its complications, and to guide adequate focused management.

Our review advocates for a full clinical initial evaluation that requires not only a complete history and a comprehensive focused physical examination, but also identification of the mechanism of injury, the evolution and timeline of the symptoms, and determination of any factors that could affect its presentation or management. We stated that family physicians should be well aware of the available standardized tools and where to quickly find them to assess the general symptoms and cognitive status of pediatric patients. Adequate observation of patients with concussion is paramount, and family physicians should guide parents in this process by providing the correct information and providing education; the available resources we presented can be used to accomplish this task. When complications need to be ruled out, the physician can make evidence-based decisions whether to request imaging studies by using information from the CATCH (Canadian Assessment of Tomography for Childhood Head Injury) study.<sup>4</sup>

The management of concussion is based on the status and progress of the individual patient, and the treating doctor should coordinate adequate follow-up assessments, allow return to study or to play in a safe manner, and use neuropsychologic testing when needed.

We gladly welcome the presented guidelines, which contribute to cooperative work directed to facilitate the efforts of treating physicians and to improve the attention offered to children and adolescents.

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**Competing interests**

None declared

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## Not antagonist treatment

Regarding the article “Safety of the newer class of opioid antagonists in pregnancy,”<sup>1</sup> the title of the article notwithstanding, its focus—the buprenorphine-naloxone combination—is not antagonist treatment. Rather, it is treatment with an opioid—buprenorphine—that has both agonist and antagonist properties, but a therapeutic effect due entirely to the former. With or without naloxone, buprenorphine is intended to eliminate or minimize withdrawal symptoms and establish a high degree of tolerance so that supplemental opioids will not produce euphoria, respiratory depression, sedation, etc. Precisely the same statement, of course, applies to methadone. The only rationale for adding the antagonist naloxone to buprenorphine is the hope that it will lessen the likelihood of misuse by parenteral routes of administration.<sup>2</sup>

The new data presented in the article do not seem to have relevance in deciding clinical management of opioid-dependent pregnant women. The experiences of only 10 babies are reported, 8 having been born to mothers taking maintenance therapy throughout pregnancy and 2 born to mothers for whom buprenorphine-naloxone was initiated during the first trimester. As the study was a retrospective chart review of live births, no information could be gathered regarding retention of the expectant mothers in treatment (retention for dependence or for prenatal care). This is an omission of particular importance, as the MOTHER (Maternal Opioid Treatment: Human Experimental Research) study, cited by the authors, reported that 33% of women who started taking buprenorphine dropped out before giving birth—almost 10% after the very first dose.<sup>3</sup>

It must also be noted that “[initial doses of] buprenorphine (and particularly buprenorphine/naloxone) can precipitate an opioid withdrawal syndrome if administered to a patient who is opioid dependent.”<sup>4</sup> This is a particular concern when buprenorphine is initiated during pregnancy, as “[o]pioid withdrawal has been associated with poor fetal growth, preterm delivery, and fetal death.”<sup>5</sup> The authors of the Motherisk article state at the outset that the

“standard for managing opioid dependence in pregnant women is methadone maintenance.”<sup>1</sup> Nothing in the article seems to challenge that conclusion.

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—Susan Gevertz

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**Competing interests**

None declared

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1. Poon S, Pupco A, Koren G, Bozzo P. Safety of the newer class of opioid antagonists in pregnancy. *Can Fam Physician* 2014;60:631-2 (Eng), e348-9 (Fr).
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## Response

I wish to thank Dr Newman and Ms Gevertz for their interest in our Motherisk Update.<sup>1</sup> They are, of course, correct that the buprenorphine-naloxone combination is not, per se, given as an opioid antidote. However, the fetus is exposed to an opioid antagonist through this combination. Newman and Gevertz are correct that the information regarding the fetal safety of naloxone is sparse. This is typical for many other drugs, and because 50% of pregnancies are unplanned, one must counsel mothers with the available information. With increasing use of buprenorphine, more women will likely be exposed to its combination with naloxone, and this information will be important.

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**Competing interests**

None declared

**Reference**

1. Poon S, Pupco A, Koren G, Bozzo P. Safety of the newer class of opioid antagonists in pregnancy. *Can Fam Physician* 2014;60:631-2 (Eng), e348-9 (Fr).

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