Not antagonist treatment

Regarding the article “Safety of the newer class of opioid antagonists in pregnancy,” 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.

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.

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.” 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.” The authors of the Motherisk article state at the outset that the “standard for managing opioid dependence in pregnant women is methadone maintenance.” Nothing in the article seems to challenge that conclusion.

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Response

I wish to thank Dr Newman and Ms Gevertz for their interest in our Motherisk Update. 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

References

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