# **Christchurch Medicines Information Service November 2024**







## Analgesia for acute pain during pregnancy or while breastfeeding

Treatment of acute pain (e.g. headache, soft tissue injuries, or following minor procedures) in pregnant and breastfeeding women follows the same principles as for all adults (illustrated below).

> Mild to moderate pain: Paracetamol and/or a NSAID e.g. ibuprofen or celecoxib

Moderate pain: Add a NSAID or a weak opioid e.g. codeine, tramadol

Severe pain: Strong opioid with a laxative (+ paracetamol) e.g. morphine

As pain resolves cease opioids before paracetamol and NSAIDs.

In pregnancy assume all medicines cross the placenta and the benefits to the mother taking the medicine need to be weighed against possible risks to the developing foetus. When breast feeding most medicines are only in small amounts in breastmilk, often not enough to affect the infant.

	Pregnancy	Breastfeeding
Paracetamol	Safe to use at any stage of pregnancy.	Safe to use.
NSAIDs	Use up to week 20 of pregnancy if clinically indicated. <b>Avoid from week 20.</b> Consider avoiding if planning pregnancy.	The safety of most NSAIDs is known. For example, the relative infant dose (RID) for ibuprofen, diclofenac, and naproxen is 0.4%, 0.1%, and 3.3% respectively. These are considered 'safe' to use in breast feeding <sup>1,2,3</sup>
Codeine	Safe to use at any stage of pregnancy.	Safe to use in breastfeeding <sup>b</sup> .
Tramadola	Limited and conflicting data when used in first trimester. Safe to use in 2 <sup>nd</sup> or 3 <sup>rd</sup> trimester.	Short courses are safe to use.
Morphine	Safe to use at any stage of pregnancy.	Safe to use <sup>c</sup> .

<sup>&</sup>lt;sup>a</sup>Use near term may be associated with withdrawal symptoms in the neonate and respiratory depression

#### Paracetamol

There is extensive experience in millions of pregnancies that paracetamol is safe at any stage of pregnancy<sup>1,2,5</sup>.

A small amount of paracetamol is excreted into breast milk, but the quantity is low<sup>1,2</sup>.

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs, ibuprofen or diclofenac)

NSAIDS should only be used in the first 2 trimesters if benefits to mother outweigh risks to fetus (including fetal renal dysfunction and oligohydramnios), using lowest effective dose for shortest duration possible<sup>6</sup>.

Cautions: Use of NSAIDs at or in the days following conception reduces the chance of implantation. If attempting to conceive avoiding NSAIDs may increase the chances of success<sup>7</sup>. Women with hyperemesis should avoid NSAIDs because of the risk of acute kidney injury (AKI).

All NSAIDs are contraindicated after week 20 of pregnancy as they are known to cause adverse foetal effects including premature closure of the ductus arteriosus and neonatal pulmonary hypertension. NSAIDs can inhibit uterine

contraction, prolong the length of gestation and delay the onset of labour when given late in pregnancy. At the time of parturition, they have also been associated with excess bleeding in both the mother and the infant. NSAIDs should be avoided in oligohydramnios (they are used to treat polyhydramnios)6

#### Strong opioids and codeine

Codeine is a prodrug of morphine. There is extensive experience of safe use of morphine and codeine in pregnancy. 1,10 There is limited evidence for the safe use of other strong opioids in pregnancy. Methadone and buprenorphine have been used in pregnancy to treat opioid dependence<sup>11</sup>.

Regular use of high doses of strong opioids near term are associated with neonatal withdrawal symptoms and respiratory depression<sup>1,2</sup>.

Small amounts of morphine and other strong opioids are transferred to breastmilk<sup>3</sup>, in quantities unlikely to cause harm<sup>1,2</sup>.

<sup>&</sup>lt;sup>b</sup>Note: Some guidance incorrectly suggests codeine is unsafe in breast feeding, based on a misunderstanding of one case report<sup>4</sup> <sup>c</sup>Caution at higher doses with young infants, particularly if premature.

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#### Tramado

**Tramadol** is a synthetic opioid analogue with similar potency to codeine. There is limited and conflicting information on the safety of tramadol use early in pregnancy, some studies have reported a small increase in congenital malformations<sup>1,2</sup>, while other have found no increase<sup>12</sup>. Tramadol, like other opioids, if used in high doses late in pregnancy has the potential to cause neonatal withdrawal symptoms<sup>1,2</sup>. Overall, short courses appear safe, especially in the 2<sup>nd</sup> and 3<sup>rd</sup> trimesters<sup>1</sup>.

Small amounts of tramadol and its active metabolite are transferred to breastmilk in quantities unlikely to cause harm<sup>1,2,13</sup>.

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