

General Description of Narcotic Analgesics Used For Labor

What are narcotic analgesics?

Narcotic analgesics are systemic medications that mimic your body's own endorphins.

How are they administered?

Narcotic analgesics for labor are either administered through intravenous (IV) injection, which is the most common method or intramuscular injections (in the shoulder, hip, thigh, buttocks).

When are they administered?

They can be administered from early phase through active phase of labor or for after birth pain relief. If needed during transition, your labor will be carefully assessed before administration since it is wanted that the drug will be worn off before the birth of the baby.

Each narcotic has a limit of doses allowed; ask your caregiver what is the most common narcotic used at your hospital, when you can have a narcotic, and what is the limit of doses.

How effective is narcotic analgesics?

Narcotics analgesics provide pain reduction. These drugs do not cause numbness and therefore they do not provide complete absence of sensation from contractions. Women who choose a narcotic analgesic will experience less pain intensity and less pain duration during a contraction.

Relief is usually felt within 3-10 minutes through intravenous injection and 5-20 minutes through intramuscular injection.

Intravenous narcotics can last from 30 minutes- 6 hours depending on the type and dosage of medication. Intramuscular narcotics can last 2-6 hours depending on the type and dosage of medication.

What are the common reasons some women choose narcotics over epidurals?

- Women who want to avoid an epidural.
- Women seeking 'relief' or a rest from contractions.
- Women waiting for the administration of an epidural.

What are the general benefits of narcotic analgesics?

- Easily and quickly administered.
- Does not require an anesthesiologist to be present.
- Can be given to patients that do not want or cannot have a regional anesthetic.
- Not as invasive as other techniques such as epidural.
- Can be used for initial pain relief without ruling out other options should they become necessary (you don't lose the ability to have an epidural later if you change your mind).
- Encourages relaxation, most women fall asleep with a full dose.
- Can reduce tension and anxiety.

- Can speed up a labor that was held back by extreme muscle tension.
- Narcotic analgesics do not cause the immobility associated with epidurals.

What are the more common and general possible risks and/or side effects of narcotic analgesics?

For the mother...

- Usually requires IV fluids.
- Can slow labor increasing a need for pitocin.
- Can cause itchiness all over the mother's body, especially the face and neck.
- Requires the use of fetal monitoring, which decreases the mother's mobility.
- Can cause sedation.
- Can cause breathing problems.
- Can cause low blood pressure.
- Can increase the sensations of nausea and/or vomiting.
- As with any medication, there is a possibility that it will not be effective.

For the baby...

- Increased risk for fetal distress.
- Decreased fetal heart rate variability.
- It crosses the placenta and can cause fetal depression.
(How much depression actually occurs depends on the drug chosen, the route by which it is administered, the timing of administration with regards to delivery of the baby and the presence of other obstetric complications. The depressive effects of these drugs on the newborn seem to be most pronounced when the delivery occurs within 2-3 hours of the mother receiving the drug.)
- Decreased neurobehavioral scores. Baby's reflexes and behavioral responses may be altered for hours to weeks.

The most common Narcotic Analgesics used for labor.

Morphine

The common uses are as an early stage labor pain relief through intramuscular injection and after birth pain relief through intramuscular injection, IV, or pill. It takes about 20-30 minutes to take effect through intramuscular injection and lasts 4-6 hours.

Fentanyl (Sublimaze)

This drug is commonly used during labor and is given through an IV. It takes 3-5 minutes to take effect and lasts 30-60 minutes at a dosage of 25-50 micrograms. This drug can be given through intramuscular injection.

At the dosages mentioned, there seem to be no significant effects on neonatal Apgar or neurobehavioral scores.

Butorphanol (Stadol) *

A combination drug (narcotic plus narcotic antagonist). This drug is commonly used during labor and is typically given through an IV. It takes 3-5 minutes to take effect and lasts 3-4 hours at a dosage of 1-2 milligrams. This drug can be given through intramuscular injection.

This drug does not seem to have any depressant effects on the neonate.

Nalbuphine (Nubain) *

A combination drug (narcotic plus narcotic antagonist). This drug is commonly used during labor and is typically given through an IV. It takes 3-5 minutes to take effect and lasts 3-6 hours at a dosage of 5-10 milligrams. This drug can be given through intramuscular injection.

*** Stadol and Nubain**

The major advantage of these agents is that they exhibit what is known as a "ceiling effect" for respiratory depression, meaning that once dosages increase past a certain level, no increase in respiratory depression is seen. Therefore, these drugs are theoretically safer than drugs that do not exhibit this property.

The major drawback of these agents is that there is also a ceiling effect on the analgesic level, meaning that once dosages increase past a certain level, there is also no increase in the amount of pain relief one can obtain from them. They may also limit the effectiveness of the other, more traditional narcotics once they are given. In addition, the other side effects still exist so that complaints of drowsiness, dizziness, weakness, nausea, vomiting, etc. are still common as dosages increase. In addition, these drugs cause a psychomimetic reaction (dysphoria or a feeling of unease) in some patients. These drugs should be used with extreme caution in patients that have a recent history of narcotic usage for any reason because they may precipitate a withdrawal type reaction.

What is a Narcotic Antagonist?

Naloxone (Narcan)

Narcotic Antagonist reduces the narcotic effects such as hallucinations, respiratory depression, sedation, and hypotension. This can be given to the mother or baby, through injection, if narcotic toxicity is found after receiving a narcotic analgesic. It also can be combined with a narcotic to decrease some of the narcotics possible negative side effects.

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