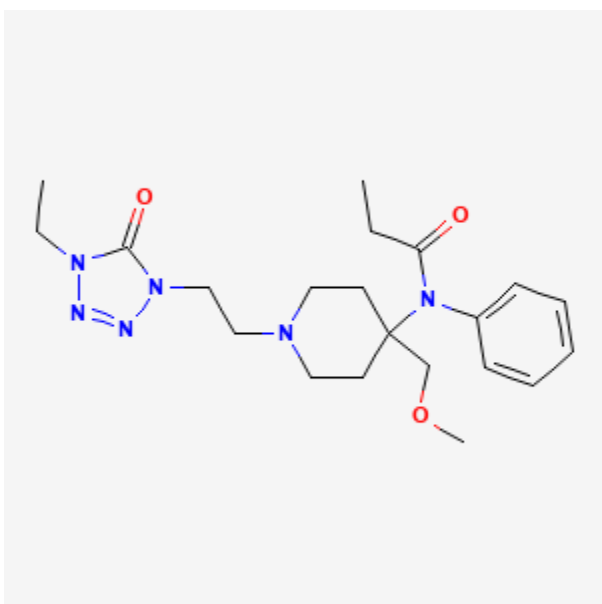




Alfentanil

Revised: January 15, 2024.

CASRN: 71195-58-9



Drug Levels and Effects

Summary of Use during Lactation

When used epidurally or intravenously during labor or for a short time immediately postpartum, amounts of alfentanil ingested by the neonate are small and would not be expected to cause any adverse effects in breastfed infants. Alfentanil is highly protein bound which should result in less transfer to breastmilk than other opiates. If alfentanil is required by the mother of a newborn, it is not a reason to discontinue breastfeeding; however, once the mother's milk comes in, it is best to provide pain control with a nonnarcotic analgesic and limit maternal to 2 to 3 days with close infant monitoring. If the baby shows signs of increased sleepiness (more than usual), difficulty breastfeeding, breathing difficulties, or limpness, a physician should be contacted immediately. Because there is no published experience with repeated doses of intravenous alfentanil during established lactation, other

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agents may be preferred, especially while nursing a newborn or preterm infant. Labor pain medication may delay the onset of lactation.

Drug Levels

Maternal Levels. Nine women in the early postpartum period were given intravenous alfentanil 50 mcg initially and then 10 mcg as needed during tubal ligation surgery under general anesthesia. Colostrum was sampled prior to surgery at 4 and 28 hours after the last intraoperative dose. No postoperative doses were given. At 4 hours after the last dose, the average level of alfentanil in colostrum was 0.88 mcg/L and the highest measured level was 1.5 mcg/L. Alfentanil milk levels 28 hours after the last dose were about the same as presurgery (control) levels; however, average cumulative alfentanil dosage was not reported.[1] Using the highest measured alfentanil level in this study, an exclusively breastfed infant would receive an alfentanil dosage of 0.2 mcg/kg daily.

Infant Levels. Relevant published information was not found as of the revision date.

Effects in Breastfed Infants

Relevant published information was not found as of the revision date.

Effects on Lactation and Breastmilk

Narcotics can increase serum prolactin.[2,3] However, the prolactin level in a mother with established lactation may not affect her ability to breastfeed.

A national survey of women and their infants from late pregnancy through 12 months postpartum compared the time of lactogenesis II in mothers who did and did not receive pain medication during labor. Categories of medication were spinal or epidural only, spinal or epidural plus another medication, and other pain medication only. Women who received medications from any of the categories had about twice the risk of having delayed lactogenesis II (>72 hours) compared to women who received no labor pain medication.[4]

Alternate Drugs to Consider

Acetaminophen, Butorphanol, Fentanyl, Hydromorphone, Ibuprofen, Morphine

References

1. Giesecke AH, Rice LJ, Lipton JM. Alfentanil in colostrum. *Anesthesiology* 1985;63:A284. Available at: <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=yrovfta&NEWS=N&AN=00000542-198509001-00284>
2. Tolis G, Dent R, Guyda H. Opiates, prolactin, and the dopamine receptor. *J Clin Endocrinol Metab* 1978;47:200-3. PubMed PMID: 263291.
3. Frecska E, Perenyi A, Arato M. Blunted prolactin response to fentanyl in depression. Normalizing effect of partial sleep deprivation. *Psychiatry Res* 2003;118:155-64. PubMed PMID: 12798980.
4. Lind JN, Petersen EE, Lederer PA, et al. Infant and maternal characteristics in neonatal abstinence syndrome--selected hospitals in Florida, 2010-2011. *MMWR Morb Mortal Wkly Rep* 2015;64:213-6. PubMed PMID: 25742381.

Substance Identification

Substance Name

Alfentanil

CAS Registry Number

71195-58-9

Drug Class

Breast Feeding

Lactation

Milk, Human

Analgesics, Opioid

Narcotics

Anesthetics, Intravenous