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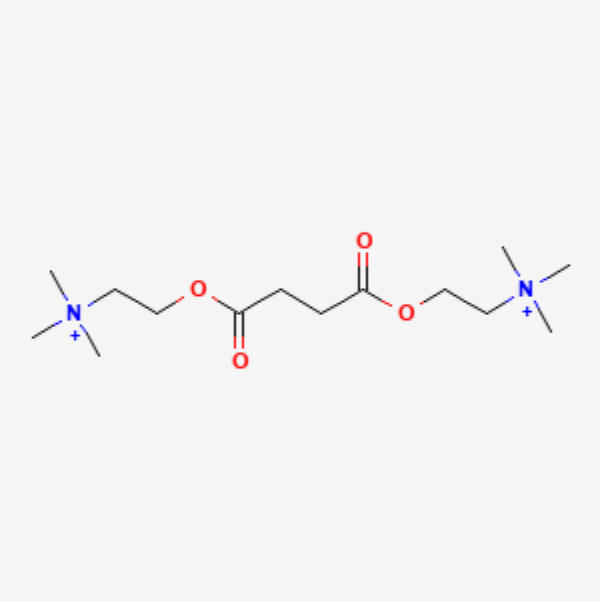
Succinylcholine

Revised: November 16, 2020.

CASRN: 306-40-1



Drug Levels and Effects

Summary of Use during Lactation

No information is available on the use of succinylcholine during breastfeeding. Because it is rapidly eliminated and poorly absorbed orally, it is not likely to reach the bloodstream of the infant or cause any adverse effects in breastfed infants.[1,2] A general anesthetic regimen that included succinylcholine for cesarean section caused a delay in the time to the first breastfeeding, but the part that succinylcholine played in this difference in outcome in unknown.

Drug Levels

Succinylcholine is rapidly hydrolyzed in maternal plasma and has a short half-life of about 3 to 5 minutes. It is unlikely to be excreted into milk or absorbed orally by the infant because of its highly polar nature.[1]

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

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

A randomized, but nonblinded, study in women undergoing cesarean section compared epidural anesthesia with bupivacaine to general anesthesia with intravenous thiopental 4 mg/kg and succinylcholine 1.5 mg/kg for induction followed by nitrous oxide and isoflurane. The time to the first breastfeed was significantly shorter (107 vs 228 minutes) with the epidural anesthesia than with general anesthesia. This difference was probably caused by the anesthesia's effects on the infant, because the Apgar and neurologic and adaptive scores were significantly lower in the general anesthesia group of infants. It is not known what part succinylcholine played in this difference in outcome.[3]

Alternate Drugs to Consider

Atracurium, Cisatracurium, Rocuronium

References

1. Spigset O. Anaesthetic agents and excretion in breast milk. Acta Anaesthesiol Scand. 1994;38:94–103. PubMed PMID: 8171959.
2. Howie WO, McMullen PC. Breastfeeding problems following anesthetic administration. J Perinat Educ. 2006;15:50–7. PubMed PMID: 17541461.
3. Sener EB, Guldogus N, Karakaya D, et al. Comparison of neonatal effects of epidural and general anesthesia for Cesarean section. Gynecol Obstet Invest. 2003;55:41–5. PubMed PMID: 12624551.

Substance Identification

Substance Name

Succinylcholine

CAS Registry Number

306-40-1

Drug Class

Breast Feeding

Lactation

Muscle Relaxants

Neuromuscular Depolarizing Agents