

U.S. National Library of Medicine National Center for Biotechnology Information **NLM Citation:** Drugs and Lactation Database (LactMed®) [Internet]. Bethesda (MD): National Institute of Child Health and Human Development; 2006-. Botulin A. [Updated 2024 Jun 15]. **Bookshelf URL:** https://www.ncbi.nlm.nih.gov/books/



Botulin A

Revised: June 15, 2024.

CASRN: 93384-43-1

# **Drug Levels and Effects**

## Summary of Use during Lactation

No data exist on the medical use of botulin A during breastfeeding. However, it is not detectable systemically after intramuscular use, thus excretion into breast milk is considered unlikely. The closely related drug, onabotulinumtoxinA was not detectable in the milk of two women and detectable in only minute amounts in two others after 40 to 92 units injected into the face.[1] Infants have been safely breastfed during maternal botulism and no botulinum toxin was detectable in the milk of one mother or in her infant. Breastfeeding appears to protect infants against botulism.[2] No special precautions are required.

### **Drug Levels**

*Maternal Levels*. Published information on the medical use of botulin A during breastfeeding was not found as of the revision date.

Type A botulinum toxin was detected in the blood and stools of a nursing mother after ingesting fermented salmon eggs. She was given 2 vials of trivalent botulism antitoxin, 1 intravenously and 1 intramuscularly. A milk sample obtained 3 days after the onset of her illness and 4 hours after administration of botulinum antitoxin had no detectable botulinum toxin nor botulism organisms.[3]

*Infant Levels.* Type A botulinum toxin was detected in the blood and stools of a nursing mother after ingesting fermented salmon eggs. No botulinum toxin was detected in the breastfed infant's blood or stool on the day the mother was admitted to the hospital (3 days after the onset of illness) and no botulism organisms were detected in the infant's stools.[3]

## **Effects in Breastfed Infants**

Published information on the medical use of botulin A during breastfeeding was not found as of the revision date.

**Disclaimer:** Information presented in this database is not meant as a substitute for professional judgment. You should consult your healthcare provider for breastfeeding advice related to your particular situation. The U.S. government does not warrant or assume any liability or responsibility for the accuracy or completeness of the information on this Site.

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A woman developed botulism after ingesting fermented salmon eggs while breastfeeding her 8-month-old breastfed (extent not stated) infant. The infant developed no signs or symptoms of botulism even though she continued to nurse throughout the mother's hospitalization.[3]

One mother breastfed her infant while she was experiencing toxicity from botulism poisoning. She breastfed her 2-month-old infant. Although the mother died, the infant had no symptoms.[4]

#### **Effects on Lactation and Breastmilk**

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

#### References

- 1. Hudson C, Wilson P, Lieberman D, et al. Analysis of breast milk samples in lactating women after undergoing botulinum toxin injections for facial rejuvenation: A pilot study. Facial Plast Surg Aesthet Med 2024. PubMed PMID: 38306172.
- 2. Arnon SS, Damus K, Thompson B, et al. Protective role of human milk against sudden death from infant botulism. J Pediatr 1982;100:568-73. PubMed PMID: 7038077.
- 3. Middaugh J. Botulism and breast milk. N Engl J Med 1978;298:343. PubMed PMID: 622098.
- 4. Douthirt C. An outbreak of botulism in Tucumcari, New Mexico. Southwest Med 1938:51-3.

# **Substance Identification**

#### **Substance Name**

Botulin A

### **CAS Registry Number**

93384-43-1

## **Drug Class**

Breast Feeding Lactation Milk, Human Bacterial Toxins Neuromuscular Agents Neurotoxins