



## OnabotulinumtoxinA

Revised: February 15, 2024.

CASRN: 93384-43-1

## Drug Levels and Effects

### Summary of Use during Lactation

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. One infant was safely breastfed during maternal botulism and no botulinum toxin was detectable in the mother's milk or infant. Breastfeeding appears to protect infants against botulism.[1] No special precautions are required.

### Drug Levels

*Maternal Levels.* 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.[2]

Four women undergoing cosmetic procedures were injected with doses ranging from 40 to 92 units of onabotulinumtoxinA. Milk samples were taken at baseline and 1, 3 and 5 hours after the injections. Two women had undetectable (<46 ng/L) levels in all samples after receiving 54 and 92 units. Two other women who received 40 and 46 units had peak milk levels of 422 ng/L and 747 ng/L, respectively.[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.[2]

### Effects in Breastfed Infants

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.[2]

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## Effects on Lactation and Breastmilk

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

## Alternate Drugs to Consider

(Migraine Prophylaxis) [Divalproex](#), [Erenumab](#), [Metoprolol](#), [Nortriptyline](#), [Propranolol](#), [Rimegepant](#), [Topiramate](#), [Valproic Acid](#)

## References

1. 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.
2. Middelburg J. Botulism and breast milk. N Engl J Med 1978;298:343. PubMed PMID: 622098.
3. 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.

## Substance Identification

### Substance Name

onabotulinumtoxinA

### CAS Registry Number

93384-43-1

### Drug Class

Breastfeeding

Lactation

Milk, Human

Bacterial Toxins

Neuromuscular Agents

Neurotoxins