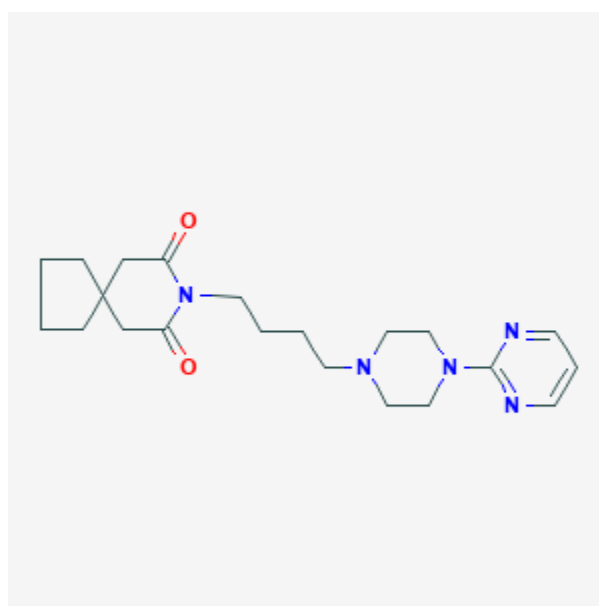




Buspirone

Revised: October 31, 2018.

CASRN: 36505-84-7



Drug Levels and Effects

Summary of Use during Lactation

Limited information indicates that maternal doses of buspirone up to 45 mg daily produce low levels in milk. Because no information is available on the long-term use of buspirone during breastfeeding, an alternate drug may be preferred, especially while nursing a newborn or preterm infant.

Drug Levels

Maternal Levels. A woman was taking buspirone 15 mg 3 times daily during pregnancy and postpartum. On day 13 postpartum, buspirone was undetectable in breastmilk by HPLC assay (limit of detection and time of sample not stated).[1]

Infant Levels. In the exclusively breastfed infant of a mother who was taking buspirone 15 mg 3 times daily, buspirone was undetectable in the infants's serum by HPLC assay (limit of detection and time of sample not stated) on days 13 and 21 postpartum.[1]

Effects in Breastfed Infants

Possible drug-induced seizure-like activity and cyanosis occurred in a breastfed 3-week-old whose mother was taking buspirone 15 mg 3 times daily as well as fluoxetine and carbamazepine during pregnancy and breastfeeding. The authors thought that this reaction, if drug induced, was most likely caused by fluoxetine.[1]

One exclusively breastfed 11-week-old infant was breastfed during maternal therapy with buspirone 10 mg daily and venlafaxine 300 mg daily. No adverse reactions were reported by the mother or in the medical records.[2]

Effects on Lactation and Breastmilk

Buspirone increases serum prolactin.[3][4][5][6] Galactorrhea was reported in a women taking venlafaxine after buspirone was added to her regimen. However, when buspirone was discontinued, galactorrhea persisted.[7] The prolactin level in a mother with established lactation may not affect her ability to breastfeed.

Alternate Drugs to Consider

Lorazepam, Oxazepam

References

1. Brent NB, Wisner KL. Fluoxetine and carbamazepine concentrations in a nursing mother/infant pair. *Clin Pediatr (Phila)*. 1998;37:41-4. PubMed PMID: 9475699.
2. Newport DJ, Ritchie JC, Knight BT et al. Venlafaxine in human breast milk and nursing infant plasma: determination of exposure. *J Clin Psychiatry*. 2009;70:1304-10. PubMed PMID: 19607765.
3. Bridge MW, Marvin G, Thompson CE et al. Quantifying the 5-HT1a agonist action of buspirone in man. *Psychopharmacology (Berl)*. 2001;158:224-9. PubMed PMID: 11713611.
4. Gomez-Gil E, Navines R, Martinez De Osaba MJ et al. Hormonal responses to the 5-HT1a agonist buspirone in remitted endogenous depressive patients after long-term imipramine treatment. *Psychoneuroendocrinology*. 2010;35:481-9. PubMed PMID: 19762159.
5. Maskall DD, Zis AP, Lam RW et al. Prolactin response to buspirone challenge in the presence of dopaminergic blockade. *Biol Psychiatry*. 1995;38:235-9. PubMed PMID: 8547445.
6. Navines R, Gomez-Gil E, Martin-Santos R et al. Hormonal response to buspirone is not impaired in major depression. *Hum Psychopharmacol*. 2007;22:389-95. PubMed PMID: 17563921.
7. Sternbach H. Venlafaxine-induced galactorrhea. *J Clin Psychopharmacol*. 2003;23:109-10. PubMed PMID: 12544389.

Substance Identification

Substance Name

Buspirone

CAS Registry Number

36505-84-7

Drug Class

Breast Feeding

Lactation

Anti-Anxiety Agents

Serotonin Agonists