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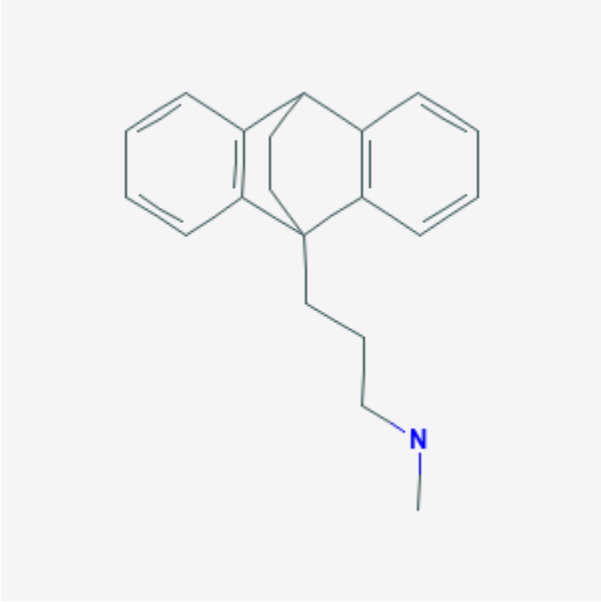
Maprotiline

Revised: February 7, 2019.

CASRN: 10262-69-8



Drug Levels and Effects

Summary of Use during Lactation

Because there is little published experience with maprotiline during breastfeeding, other agents may be preferred, especially while nursing a newborn or preterm infant.

Drug Levels

Maternal Levels. Milk maprotiline levels after a single oral dose of 100 mg have been reported to have a peak milk level at about 8 hours after a dose at about 110 mcg/L. During a regimen of 50 mg orally three times daily, milk levels of 180-260 mcg/L were reported at unstated times after various doses. Details of the above manufacturer's studies were not reported.[1][2]

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

Effects in Breastfed Infants

Although it is structurally a tetracyclic compound, maprotiline has pharmacologic actions similar to the tricyclic antidepressants.

Follow-up for 1 to 3 years in a group of 20 breastfed infants whose mothers were taking a tricyclic antidepressant found no adverse effects on growth and development.[3] Two small controlled studies indicate that other tricyclic antidepressants have no adverse effect on infant development.[4][5]

In another study, 25 infants whose mothers took a tricyclic antidepressant during pregnancy and lactation were tested formally between 15 to 71 months and found to have normal growth and development. One of the mothers was taking maprotiline.[6]

Effects on Lactation and Breastmilk

Maprotiline has caused increased serum prolactin levels and galactorrhea in nonpregnant, nonnursing patients.[6][7] The clinical relevance of these findings in nursing mothers is not known. The prolactin level in a mother with established lactation may not affect her ability to breastfeed.

An observational study looked at outcomes of 2859 women who took an antidepressant during the 2 years prior to pregnancy. Compared to women who did not take an antidepressant during pregnancy, mothers who took an antidepressant during all 3 trimesters of pregnancy were 37% less likely to be breastfeeding upon hospital discharge. Mothers who took an antidepressant only during the third trimester were 75% less likely to be breastfeeding at discharge. Those who took an antidepressant only during the first and second trimesters did not have a reduced likelihood of breastfeeding at discharge.[8] The antidepressants used by the mothers were not specified.

A retrospective cohort study of hospital electronic medical records from 2001 to 2008 compared women who had been dispensed an antidepressant during late gestation (n = 575) to those who had a psychiatric illness but did not receive an antidepressant (n = 1552) and mothers who did not have a psychiatric diagnosis (n = 30,535). Women who received an antidepressant were 37% less likely to be breastfeeding at discharge than women without a psychiatric diagnosis, but no less likely to be breastfeeding than untreated mothers with a psychiatric diagnosis.[9] None of the mothers were taking maprotiline.

Alternate Drugs to Consider

Nortriptyline, Paroxetine, Sertraline

References

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Substance Identification

Substance Name

Maprotiline

CAS Registry Number

10262-69-8

Drug Class

Breast Feeding

Lactation

Antidepressive Agents

Adrenergic Uptake Inhibitors