

Breastfeeding and Medication



Quetiapine and Breastfeeding

Quetiapine is probably compatible with use during breastfeeding in dose < 400mg daily based on limited studies and low theoretical infant dose. Be aware of possibility of drowsiness in the baby. Mother should not fall asleep with the baby in bed, on a settee or chair.

Bipolar disease description

Bipolar disorder is a mental health condition that affects moods. The latter can swing from one extreme of lethargy and depression to a feeling of being high and overactive hence the original name of manic depression.

During bouts of depression, it is not uncommon to feel suicidal or worthless and it is important to recognise this and seek a place of safety or a person you trust as quickly as possible. During a manic phase there may be feelings of having lots of energy, ambitious plans and idea. It is not uncommon to spend large amounts of money on expensive, unwanted goods and some people ask their banks to block spending above a certain level to avoid debt. It is also common to not feel like eating or sleeping, to talk quickly and become easily annoyed. For some this phase is a positive experience and a time of creativity so may reject medication. It may also become a psychotic phase where things which do not exist may be seen and heard (voices controlling actions).

It is a complex condition which may need adjustments. Around one in every 100 people will be diagnosed with it at some point in their life. It frequently develops between 15 and 19 years of age but rarely after 40. The incidence is the same in men and women. The pattern of mood swings in bipolar disorder varies widely. Some people only have a couple of episodes in their lifetime and are stable in between, while others have many episodes.

Diagnosis is made only after one episode of mania as well as the depression. In this state the mother may have an elated mood or alternatively she may feel irritable and angry. She may experience racing thoughts rapidly changing from one area to another. It may be impossible for her to be still, but the activity may be unproductive. It is reported to affect a higher proportion of intelligent people with gifted creativity.

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Quetiapine (Seroquel™)

Quetiapine is an Atypical anti-psychotic. Quetiapine may also be used in severe depression. In general, atypicals may be better tolerated with fewer extra-pyramidal side effects than the older drugs e.g., chlorpromazine and haloperidol . However, they do produce weight gain and a risk of hyperglycaemia which may need to be monitored regularly.

Quetiapine has been associated with a low incidence of extra-pyramidal symptoms, but tardive dyskinesia may occur after long-term treatment. The most frequent adverse effects with quetiapine are somnolence and dizziness. Weight gain, particularly during early treatment, has also been noted. It appears to have a minimal effect on prolactin levels

Lee *et al.* (2004) studied one mother taking 200 mg daily throughout pregnancy. Breastfeeding was not initiated in the absence of safety data until measurement of her breastmilk samples were available. Levels measured indicated that an exclusively breastfed baby would normally ingest only 0.09% of the weight adjusted dose (maximum 0.43%). The mother initiated breastfeeding 8 weeks after delivery. Follow up at 4.5 months indicated normal development with no adverse effects.

Misri *et al.* (2006) studied six mothers taking 25 to 400 mg daily together with an antidepressant. In mothers taking less than 75 mg, milk levels were below the level of detection. One mother taking 400 mg daily had a level of drug in her milk of 101 µg per litre. Mental and psychomotor tests were below the norm in two of the infants when monitored up to 18 months of age although within the norm. The authors concluded this result was due to effects other than exposure to the drug.

Several other case study reports of quetiapine use have been reported with low levels of drug reported in the babies and no adverse reactions directly attributable to the drug identified (Rampono *et al.* 2007; Kruninger *et al.* 2007; Balke 2001; Seppala 2004; Ritz 2005; Gentile 2006). A relative infant dose quoted as 0.070.1% is quoted (Hale 2017 online access).

Summary of Use during Lactation

(LactMed <https://www.ncbi.nlm.nih.gov/books/NBK501087/>)

Maternal quetiapine doses of up to 400 mg daily produce doses in milk that are less than 1% of the maternal weight-adjusted dosage. Limited long-term follow-up of infants exposed to quetiapine indicates that infants generally developed normally. A safety scoring system finds quetiapine to be possible to use during breastfeeding.[1] Systematic reviews of second-generation antipsychotics concluded that quetiapine seemed to be the first- or second-choice agent during breastfeeding.[2-4] Monitor the infant for drowsiness and developmental milestones, especially if other antipsychotics are used concurrently.

E Lactancia

<https://www.e-lactancia.org/breastfeeding/quetiapine-fumarate/product/>

Quetiapine is excreted into breast milk in clinically insignificant amounts. (Yazdani 2018, Aydin 2015, Van Boekholt 2015, Rampono 2007, Misri 2006, Lee 2004, Seppala 2004). Clinical or development problems in infants whose mothers were treated have not been observed, whether at the short or

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long term. (Levesque 2016, Sharma 2016, Aydin 2015, Van Boekholt 2015, Newport 2009, Rampono 2007, Misri 2006, Ritz 2005, Gentile 2005, Seppala 2004, Lee 2004). Very low plasma-levels of quetiapine in these infants were found. (Rampono 2007). Galactorrhoea may occur with or without an increase of prolactin. (Glocker 2021, Suttajit 2013, Mushtaq 2012, Sethi 2010, Gupta 2007, Atmaca 2002).

Expert authors consider the use of quetiapine to be safe or very probably safe during breastfeeding. (Hale, Lactmed, Uguz 2021, Teodorescu 2020, Rybakowski 2019, Pacchiarotti 2016, Schaefer 2015, Grover 2005, Larsen 2015, Parikh 2014, Rowe 2013)

Pharmacokinetics (Hale)

Quetiapine is 83% plasma protein bound. The half-life is 6 to 7 hours. Milk plasma ratio 0.3. Relative infant dose 0.02% - 0.1%

Other a typical drug options

- risperidone (Risperidal™): Limited information indicates that maternal risperidone doses of up to 6 mg daily produce low levels in milk. Observe baby for drowsiness but no adverse events reported to date.
- olanzapine (Zyprexa™): Maternal doses of olanzapine up to 20 mg daily produce low levels in milk and undetectable levels in the serum of breastfed infants. Monitor the baby for drowsiness and effective feeding.
- aripiprazole (Ablify™): Limited information indicates that maternal doses of aripiprazole up to 15 mg daily produce low levels in milk. However, it inhibits prolactin levels and despite expert advice it may not be possible to achieve a full milk supply ((Mendhekar 2006, Nordeng 2014).

References

- Balke LD, Quetiapine effective in the treatment of bipolar affective disorder during pregnancy, *World J Biol Psychiatry*, 2001;2:303S. Abstract P02115.
- Drugs and Lactation Database (LactMed) <https://www.ncbi.nlm.nih.gov/books/NBK501922/>
- E Elactancia <https://www.e-lactancia.org/>
- Gentile S, Quetiapine-fluvoxamine combination during pregnancy and while breastfeeding, *Arch Women's Ment Health*, 2006;9:158–9.
- Hale TW Medications and Mothers Milk online access Springer Publishing
- Jones W Breastfeeding and Medication Routledge 2018
- Jones W Breastfeeding and Chronic Medical Conditions Amazon 2020
- Krüniger U, Meltzer V, Hiemke C *et al.* [Pregnancy and lactation under treatment with quetiapine *Psychiatr Prax Suppl*, 2007;34:S756.
- LactMed

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- Lee A, Giesbrecht E, Dunn E, Ito S, Excretion of quetiapine in breastmilk, *Am J Psychiatry*, 2004;161:17156.
- Misri S, Corral M, Wardrop AA, Kendrick K. Quetiapine augmentation in lactation: a series of case reports. *J Clin Psychopharmacol*. 2006;26:508-11.
- Pacchiarotti I, Leon-Caballero J, Murru A et al. Mood stabilizers and antipsychotics during breastfeeding: Focus on bipolar disorder. *Eur Neuropsychopharmacol*. 2016;26:1562-78
- Rampono J, Kristensen JH, Ilett KF, Hackett LP, Kohan R, Quetiapine and breastfeeding, *Ann Pharmacother*, 2007;41:7114.
- Ritz S, Quetiapine monotherapy in post-partum onset bipolar disorder with a mixed affective state, *Eur Neuropsychopharmacol*, 2005;15 (Suppl. 3):S407. Abstract.
- Seppala J, Quetiapine ("Seroquel") is effective and well tolerated in the treatment of psychotic depression during breastfeeding, *Int J Neuropsychopharmacol*, 2004;7 (Suppl. 1):S245. Abstract P01.431. Specialist Pharmacy Service Safety in Lactation: Antipsychotics 2020 <https://www.sps.nhs.uk/articles/safety-in-lactation-antipsychotics/#:~:text=quetiapine>
- Specialist Pharmacy Service Safety in Lactation: Antipsychotics 2020 <https://www.sps.nhs.uk/articles/safety-in-lactation-antipsychotics/#:~:text=quetiapine>

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