

Using Psychotropic Medications during Pregnancy and Lactation

General Issues for all Psychotropic Medications ^{1,2,3,4}

- + Avoid medications in first trimester, if possible
- + Taper medications if discontinuing
- + Use monotherapy whenever possible
- + Use the lowest effective dose

Psychotropic Medications in Pregnancy

First Trimester

Antidepressants: ^{2,5,6,7}

- + Evidence indicates no increased risk of major malformation in the newborn or spontaneous abortion following exposure to antidepressants in early pregnancy
- + There is no indication to stop tricyclics or SSRIs as a matter of routine in early pregnancy
- + If a pregnant woman becomes depressed antidepressant medication should be prescribed with caution
- + Significant literature supports the safety of TCAs, especially Nortriptyline and Desipramine.

Lithium: ^{5,9,8}

- + Early studies suggest that the risk of malformations and Epstein Barr, from exposure to lithium early in pregnancy may have been overestimated.
- + Women with severe bipolar illness successfully maintained on lithium should carefully consider the risks and benefits of lithium.
- + The risks of lithium to the fetus and the effects of lithium withdrawal on the mother should be discussed before pregnancy

Anticonvulsants: ⁵

- + Anticonvulsants (carbamazepine, valproate, lamotrigine) increase the risk of congenital malformations
- + The risk is higher with valproate especially at doses over 1000 mg/day
- + Several of these drugs are folate antagonists.
- + All women on anticonvulsants should receive extra folate

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- + Avoid valproate as a mood stabilizer in pregnancy

Benzodiazepines: 4,5,10

- + Evidence suggests exposure may increase risk of cleft palate
- + Avoid benzodiazepines in the first trimester
- + Avoid diazepam especially because of its high milk to plasma ratio
- + Lorazepam has lower milk to plasma ratio

Second and Third Trimester

Antidepressants: 2,5,6,7

- + Neonates exposed to psychotropic medications during pregnancy should be monitored for withdrawal syndromes after deliver
- + 12 out of 55 (22 percent) reported cases of treatment with paroxetine showed evidence of withdrawal requiring treatment

Lithium: 5,9,8

- + Newborn infants of women treated with lithium in later pregnancy face potential risks of neonatal toxicity, thyroid and renal dysfunction

Consideration should be given to dose reduction and/or discontinuation two to four weeks before the expected date of delivery with recommencement after delivery

Footnote: 7,11,12

Because of the issues surrounding pregnancy and lactation, there are:

- + No controlled studies
- + Most information comes from case reports or pharmaceutical registry
- + The greatest amount of data exists for fluoxetine, TCAs and citalopram
- + There is no information on trazadone, mirtazapine or nefazadone
- + Sertraline has lower umbilical cord levels than fluoxetine

Psychotropic Medications in Lactation

If a breast-feeding mother is taking psychotropic medication, infant development should be monitored and a careful assessment made of the risks and benefits

Antidepressants: 13,14

- + TCAs: Significant literature to supports safety especially Nortriptyline and Desipramine
- + Doxepin: One case of respiratory depression reported
- + Sertraline, paroxetine and fluvoxamine: Relative infant dose of 0.3-0.5
- + No adverse clinical effects have been reported in breast-fed infants of mothers taking paroxetine (also has the lowest milk plasma ratio of sertraline, paroxetine and fluvoxamine)
- + Fluoxetine and Citalopram: Relative infant dose of 1-6 (two adverse drug reactions one infant adverse drug reaction with fluoxetine)
- + Little evidence on Fluvoxamine
- + Clomipramine Use with caution

Lithium: 13,14

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- + Lithium is excreted in breast milk at 40 percent of maternal serum levels
- + Lithium toxicity has been described in breast-fed infants
- + Avoid breast feeding while taking lithium

Anticonvulsants: ^{13,14}

- + Valproate is excreted at levels of 1 to 2 percent maternal serum levels and no clinical adverse effects have been noted
- + Carbamazepine is excreted in ranges from 6 to 65 percent of maternal serum levels
- + Valproate, Carbamazepine both considered compatible with nursing by American Academy of Pediatrics

Benzodiazepines: ^{13,14}

- + Avoid new prescriptions of benzodiazepines (except where there are concerns about drug dependence when breast feeding may be beneficial if the infant was exposed to benzodiazepines in utero)
- + Excreted in breast milk with low milk/plasma ratio
- + Clonazepam most commonly used during lactation. No adverse drug reactions reported

Antipsychotics: ^{13,14}

- + All antipsychotics are excreted in breast milk but there is no evidence to suggest that breast fed infants are at risk of toxicity or impaired development

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