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 (carbamazrpine, 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
- ***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 delivery

- 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]

- 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 1to 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

Anti-psychotics: [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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