

## **Pregnancy Drug Categories**

01

A = : Controlled studies show no risk

02

B = no evidence of risk in humans 03

C = risk cannot be ruled out

04

D = positive evidence of risk

05

X = contraindicated in pregnancy

#### **Lactation Risk Categories**

L1 = safest

L2 = safer

L3= moderately safe

L4 = possibly hazardous

L5 = Contraindicated

°Buspar: B

°Sonata: C

·Ambien: B

•Lunesta : C

°Chloral hydrate : C

# Anxiolytics and Hypnotics

# **Anxiolytics and Hypnotics**

°Xanax:L3

°Librium: L3

° Klonopin: L3

° Valium: L3 & L4 if used

chronically

°Tranxene: L3

° Estazolam : L3

° Dalmane : L3

° Ativan: L3

°Oxazepam: L3

°Doral: L2

°Restoril: L3

°Halcion: L3

°Buspar: L3

°Sonata: L2

°Ambien: L3

°Chloral hydrate: L3

## **Antiepileptics and Mood Stabilizers**

•Lamictal : C

∘Tegretol: L2

•Lamictal : L3

∘Depakene : L2

# **Antidepressants**

- Amitriptyline : C
- Amoxapine : C
- Clomipramine : C
- Norpramin : C
- Doxepin : C
- Tofranil: C
- Maprotiline : B
- Pamelor: C
- Vivactil : C
- ° Celexa: C

- ° Lexapro: C
- Prozac : C
- Fluvoxamine : C
- ° Zoloft : C
- Wellbutrin : B
- ° Cymbalta: C
- Remeron : C
- · Nefazodone: C
- ° Desyrel: C
- ° Effexor: C

# **Antidepressants**

• Amitriptyline : L2

• Amoxapine : L2

° Clomipramine : L2

Norpramin : L2

∘ Tofranil : L2

Maprotiline : L3

° Pamelor: L2

° Celexa: L3

° Lexapro : L3 in older infants

° Prozac : L2 in older infants and L3

in neonates

° Fluvoxamine : L2

° Paxil: L2

° Zoloft : L2

° Wellbutrin: L3

° Remeron: L3

° Desyrel: L2

° Effexor: L3

# **Antipsychotics**

- Abilify : C
- Chlorpromazine : C
- ° Clozaril: B
- Fluphenazine : C
- ∘ Haldol : C
- ∘ Loxitane : C
- ° Zyprexa : C
- Perphenazine : C

- ∘Orap: C
- Seroquel : C
- ∘ Risperdal : C
- Thioridazine : C
- ∘ Navane : C
- ∘ Trifluoperazine: C
- ∘ Geodon: C

# **Antipsychotics**

° Abilify: L3

° Chlorpromazine: L3

° Clozaril: L3

° Fluphenazine : L3

∘ Haldol : L2

° Zyprexa: L2

∘ Risperdal: L3

- Ten to 16% of pregnant women meet diagnostic criteria for depression, and up to 70% of pregnant women have symptoms of depression.
- Studies have shown a relapse rate of 68% in women who discontinue antidepressant therapy during pregnancy.
- Untreated maternal depression is associated with increased rates of adverse outcomes (e.g., premature birth, low birth weight, fetal growth restriction, postnatal complications), especially when depression occurs in the late second to early third trimesters.

#### <u>Major</u> Depression

- Exposure to selective serotonin reuptake inhibitors (SSRIs) late in pregnancy has been associated with transient neonatal complications; however, the potential risks associated with SSRI use must be weighed against the risk of relapse if treatment is discontinued.
- Paroxetine (Paxil) should be avoided by pregnant women and women who plan to become pregnant, and fetal echocardiography should be Considered for women exposed to paroxetine during early pregnancy.
  - Because abrupt discontinuation of this drug is associated with withdrawal symptoms and a high rate of relapse, prescribing information about discontinuation of therapy should be followed carefully.

#### Major Depression

- Rates of postpartum relapse in women with Bipolar disorder range from 32 to 67 %.
- Perinatal episodes of the disorder tend to be depressive and are more likely to recur in subsequent pregnancies.
- The risk of postpartum psychosis is increased by as much as 46 % in women with this disorder.

#### <u>Bipolar</u> Disorder

- The use of lithium during pregnancy has been associated with congenital cardiac malformations, fetal and neonatal: Cardiac arrhythmias, hypoglycemia, premature delivery, and other adverse outcomes.
- However, neurobehavioral sequelae were not found in a five-year follow-up of 60 school-age children exposed to lithium during gestation. The decision to discontinue lithium therapy during pregnancy because of fetal risks should be weighed against the maternal risks of illness exacerbation.
- The physiologic changes of pregnancy may affect the absorption, distribution, metabolism, and elimination of lithium, and :close monitoring of lithium levels during pregnancy and the postpartum period is recommended.

#### LITHIUM THERAPY

- The following guidelines have been suggested for women with Bipolar disorder who are taking lithium and plan to conceive:
  - Lithium therapy should be gradually tapered before conception in women who have mild, infrequent episodes.
  - Lithium therapy should be tapered before conception, but gradually restarted after organogenesis in women who have more severe episodes and are at moderate risk of short-term relapse.

#### LITHIUM THERAPY

- Lithium therapy should be continued throughout the pregnancy in women who have severe, frequent episodes, and these patients should be counseled about the reproductive risks associated with therapy.
- Fetal echocardiography should be considered in women exposed to lithium in the first trimester.
- The use of lithium during breastfeeding has been associated with several adverse effects; however, only 10 maternal-infant dyads have been studied. Effects included lethargy, hypotonia, hypothermia, cyanosis, and electrocardiography changes. No long-term studies have examined the neuro behavioral consequences of lithium therapy during breastfeeding.

#### LITHIUM THERAPY

- Several antiepileptic drugs are used in the treatment of bipolar disorder, including valproic acid (Depakene), Carbamazepine (Tegretol), and lamotrigine (Lamictal).
  - However, data on the fetal effects of these drugs come primarily from studies of women with seizures. It is not clear whether the underlying pathology of epilepsy contributes to the teratogenic effect of these drugs on the fetus.
- Exposure to valproic acid during pregnancy is associated with an increased risk of neural tube defects, craniofacial and cardiovascular anomalies, fetal growth restriction, and cognitive impairment.

#### ANTIEPILEPTI C THERAPY FOR BIPOLAR DISORDER

- Carbamazepine exposure during pregnancy is associated with facial dysmorphism and fingernail hypoplasia.
  - It is unclear whether carbamazepine use increases the risk of neural tube defects or developmental delay.
- The treatment of patients with mixed episodes or rapid cycling, they should be avoided during pregnancy.
- The use of lamotrigine during pregnancy has not been associated with any major fetal anomalies and is an option for maintenance therapy in women with Bipolar disorder.

#### ANTIEPILEPTI C THERAPY FOR BIPOLAR DISORDER

- Valproic acid use during lactation has been studied in 41 maternal-infant dyads; only one infant was adversely affected with thrombocytopenia and anemia.
  - The American Academy of Pediatrics and the World Health Organization consider valproic acid safe in breastfeeding women.
- Carbamazepine is ruled "probably safe"; rare side effects include transient cholestatic hepatitis and hyperbilirubinemia.

#### ANTIEPILEPTI C THERAPY FOR BIPOLAR DISORDER

- Anxiety disorders are the most common psychiatric disorders, and some (e.g., panic disorder, generalized anxiety disorder, posttraumatic stress disorder, agoraphobia) are twice as likely to be diagnosed in women than in men.
- Anxiety and stress during pregnancy are associated with spontaneous abortion, preterm delivery, and delivery complications, although a direct causal relationship has not been established.
- The use of benzodiazepines in women with anxiety disorders does not carry a significant teratogenic risk.

# Anxiety Disorders

- Prenatal exposure to diazepam (Valium) increases the risk of oral cleft, but the absolute risk increases by only 0.01 % (from six to seven in 10,000 infants).
- Maternal use of benzodiazepines shortly before delivery is associated with floppy infant syndrome (i.e., hypothermia, lethargy, poor respiratory effort, and feeding difficulties)

# **Anxiety Disorders**

- Withdrawal syndromes may persist for several months after delivery in infants whose mothers took alprazolam (Xanax), chlordiazepoxide (Librium), or diazepam.
- In general, use of benzodiazepines during breastfeeding affects the infant only if he or she has an impaired ability to metabolize the drug. In this situation, the infant may demonstrate sedation and poor feeding.

# Anxiety Disorders

- Adverse outcomes have been reported in women with schizophrenia, including preterm delivery, low birth weight, placental abnormalities, increased rates of congenital malformation, and a higher incidence of postnatal death.
- If left untreated during pregnancy, schizophrenia can have devastating effects on the mother and child.
- Atypical antipsychotics have replaced typical agents as first-line therapy for psychotic disorders because these drugs are better tolerated and may be more effective in managing the negative symptoms of schizophrenia.

#### **Schizophrenia**

- The reproductive safety data on atypical antipsychotics are limited, but the use of olanzapine (Zyprexa), risperidone (Risperdal), quetiapine (Seroquel), and clozapine (Clozaril) has been associated with increased rates of low birth weight and therapeutic abortion.
- No long-term studies of children exposed to atypical antipsychotics during gestation have been conducted. Therefore, the routine use of these drugs during pregnancy and lactation is not recommended.

#### Schizophrenia

- Typical antipsychotics have a larger reproductive safety profile; no significant teratogenic effect has been documented with chlorpromazine (Thorazine), haloperidol (Haldol), or perphenazine (Trilafon).
  - Doses of typical antipsychotics should be minimized during the peri-partum period to limit the necessity of using additional medications to manage extrapyramidal side effects.
- Data on antipsychotics in breastfeeding women are limited.
  - A small study of chlorpromazine use during breastfeeding showed no developmental deficits in children up to five years of age; however, a study of both chlorpromazine and haloperidol revealed developmental deficits in children 12 to 18 months of age.

#### **Schizophrenia**

#### **FAQs**

# Does having a mental health issue mean I shouldn't have a child?

 No, deciding to have a child is a decision you must for yourself especially regarding want, ability and future goals.
While some conditions can be inherited, the future what ifs can bog you down and cause increased anxiety. Reach out to us and we can have family meeting and all out all the facts so you can make an informed decision.

# Will I receive support from you throughout my pregnancy and postpartum?

 Of course! While we may not see a lot of pregnant women and children in office doesn't mean that we are equipment or willing to treat you throughout all stages of life.

# Do other conditions/diseases require medication changes?

 Pregnancy is a wholebody change that affects all body systems. Some of the most common diseases that requires changes along with psych is diabetes, thyroid, kidney, neuro and cardiac.

# Do I really have to do all this extra work to have a child?

 No, everything in medicine is a collaborative effort between the medial team & you and your support system. We truly care about you and your health and only want what is best for you and any of your future children.

