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Medication Use for Trauma Symptoms and PTSD in Pregnant and Breastfeeding Women Kathleen Kendall-Tackett, Ph.D., IBCLC

Traumatic events are relatively common in the lives of pregnant and breastfeeding women. According to the National Center for PTSD, the most common traumatic experiences for women are rape, sexual molestation, physical attack, being threatened with a weapon, and childhood physical abuse (National Center for PTSD, www.ncptsd.va.gov). Trauma in the perinatal period can also be caused by previous pregnancy loss, preterm birth, neonatal death, or a life-threatening birth experience. Some trauma-exposed women will develop posttraumatic symptoms and others will meet full criteria for PTSD.

Comprehensive trauma treatment involves a wide range of activities including patient education, peer support, EMDR, and trauma-focused psychotherapy. Clinicians treating women trauma survivors may also treat them while they are either pregnant or breastfeeding. Most of the standard treatments for PTSD are non-pharmacologic and therefore quite safe for both. But medications are also commonly used to treat PTSD and trauma symptoms. According to Friedman et al. (2009), medications have three potential benefits for patients: 1) they ameliorate PTSD symptoms, 2) they treat comorbid disorders, and 3) the reduce symptoms that can negatively affect both psychotherapy and daily living.

Medications for PTSD in Pregnant and Breastfeeding Women

Two recent articles have outlined the state of the art in terms of medication choices for trauma symptoms and trauma symptoms and PTSD (Alderman et al., 2009; Friedman et al., 2009). The classes of medications used to treat PTSD include SSRIs, SNRIs, mirtazapine, SARIs, adrenergic agents, and atypical antipsychotics. Benzodiazepines, anticonvulsants, cyproheptadine, and buspirone cannot be recommended at this time (Friedman et al., 2009).

In each of these classes of medications, there are safer choices for pregnant and breastfeeding women. In perinatal health, the standard reference regarding medication use in this population is *Medications and Mothers' Milk* (Hale, 201-). Below is a summary of current medications recommended for trauma symptoms/PTSD, with their pregnancy and lactation risk categories. The pregnancy risk categories are based on U.S. F.D.A. guidelines.

Table 1

FDA Pregnancy Risk Categories

Pregnancy Risk What it Means				
Category	TO AND AL ALAUMAN			
A	Controlled studies in women fail to demonstrate a risk to the fetus in the first trimester (and there is no evidence of a risk in later trimesters) and the possibility of fetal harm appears remote.			
В	Either animal-reproduction studies have not demonstrated a fetal risk, but there are no controlled studies in pregnant women; or animal-reproduction studies have shown an adverse effect (other than a decrease in fertility) that was not confirmed in controlled studies in women in the first trimester (and there is no evidence of a risk in later trimesters).			
С	Either studies in animals have revealed adverse effects on the fetus (teratogenic or embryocidal, or other) and there are no controlled studies in women, or studies in women and animals are not available. Drugs should be given only if the potential benefit justifies the potential risk to the fetus.			
D	There is positive evidence of human fetal risk, but the benefits from use in pregnant women may be acceptable despite the risk (e.g., if the drug is needed in a lifethreatening situation or for a serious disease for which safer drugs cannot be used or are ineffective).			
X	Studies in animals or human beings have demonstrated fetal abnormalities, or there is evidence of fetal risk based on human experience, or both, and the risk of the use of the drug in pregnant women clearly outweighs any possible benefit. The drug is contraindicated in women who are or may become pregnant.			











Table 2

Lactation Risk Categories

Lactation Risk Category	What it Means
L1: Safest	Drug has been taken by a large number of breastfeeding mothers without any observed increase in adverse effects in the infant. Controlled studies in breastfeeding women fail to demonstrate a risk to the infant and the possibility of harm to the breastfeeding infant is remote; or the product is not orally bioavailable in an infant.
L2: Safer	Drug that has been studied in a limited number of breastfeeding women without an increase in adverse effects in the infant. And/or the evidence of a demonstrated risk which is likely to follow use of this medication in a breastfeeding woman is remote.
L3: Moderately Safe	There are no controlled studies in breastfeeding women, however, the risk of untoward effects is possible; or controlled studies show only minimal non-threatening adverse effects. Drugs should be given only if the potential benefit justifies the potential risk to the infant. New medications that have absolutely no published data are automatically categorized in this category, regardless of how safe they may be.
L4: Possibly hazardous	There is positive evidence of risk to a breastfed infant or to breastmilk production, but the benefits from use in breastfeeding mothers may be acceptable despite the risk of the infant (e.g., if the drug is needed in a life-threatening situation or for a serious disease for which safer drugs cannot be used or are ineffective.)
L5: Contraindicated	Studies in breastfeeding mothers have been demonstrated that there is significant and documented risk to the infant based on human experience, or it is a medication that has a high risk of causing significant damage to an infant. The risk of using the drug in breastfeeding women clearly outweighs any possible benefit from breastfeeding. The drug is contraindicated in women who are breastfeeding an infant.

From Hale, T. (2010). *Medications and Mothers' Milk, 14th Edition*. Amarillo, TX: Hale Publishing. Used with permission.

Antidepressants

Selective Serotonin Reuptake Inhibitors (SSRIs)

SSRIs address all three symptom clusters of PTSD: reexperiencing, avoidance and numbing, and hyperarousal (Friedman, 2001; Friedman et al., 2009). In the U.S., sertraline (Zoloft) was the first SSRI that was FDA-approved as a treatment for PTSD. Paroxetine (Paxil) is the treatment of choice in the U.K, and the only drug listed with a current U.K. product license for PTSD (National Institute for Clinical Excellence, 2005). Zoloft is also the preferred SSRIs for breastfeeding mothers because its inert metabolites mean that babies are exposed to less than one percent of the mothers' dose (Hale, 2010). Paxil also results in low levels of exposure for breastfeeding infants, but there is currently a black-box warning against using it during pregnancy. Lexapro (escitalopram) is another good choice for breastfeeding mothers.

Other SSRIs, including fluoxetine (Prozac) and citalopram (Celexa), can also be used to treat PTSD, but result in higher levels of exposure for infants. None of these are contraindicated for breastfeeding mothers, but sertraline, paroxetine and escitalopram are better choices whenever possible (Hale, 2010).

Newer Antidepressants

Some newer types of antidepressants can also be used (Friedman et al., 2009). These include venlafaxine (Effexor) and mirtazapine (Remeron). Venlafaxine is a selective norepinephrine reuptake inhibitor (SNRI) and is a frontline treatment for PTSD. Mirtazapine is also showing promise (Friedman et al., 2009). Both have a rating of L3 ("moderately safe"), and should be prescribed only if the benefit outweighs the potential risk to the infant (Hale, 2010).

Serotonin-2 Antagonists/Reuptake Inhibitors (SARIs)

Trazodone (Desyrel) is a SARI with modest efficacy, but can be a useful adjunctive treatment to promote sleep (Friedman et al., 2009). Trazodone suppresses REM sleep, which reduces the number of nightmares patients experience (Lange et al., 2000). Because trazodone is sedative, breastfeeding women should not share a bed with their babies while taking it. (Nefazodone, the other medication in this class, has been removed from the U.S. market due to liver toxicity.)

Adrenergic Agents

The adrenergic agents are another class of medications used to treat trauma symptoms/PTSD. Adrenergic agents work by blocking norepinephrine receptors and include clonidine (Catapres) and guanfacine (Tenex). [Propranolol (Inderal) is also used, but *not* when a patient has comorbid depression (Friedman, 2001).] Adrenergic agents are frequently prescribed to control hypertension, but in patients with PTSD, they also control symptoms of intrusive memories and hyperarousal. Prazosin (Minipress), an alpha blocker, can be helpful in reducing PTSD-related nightmares (Friedman et al., 2009), but has a rating of L4 ("possibly hazardous"), and should be used with extreme caution in breastfeeding women.











Clonidine is excreted into human milk, with the baby receiving about 6.8% of the mother's dose. It may also reduce prolactin, which can influence milk production (Hale, 20`0). Guanfacine has not been studied with regard to human milk. However, since this medication has low molecular weight, a high volume of distribution, and penetrates the central nervous system at high levels, it is likely to penetrate the milk, so caution is advised (Hale, 2010).

Atypical Anti-psychotics

Atypical anti-psychotics may also be added to the treatment regimen as an adjunct therapy for partial responders. These medications may help lessen anxiety responses. The medications within this class include risperidone (Risperdal), quetiapine (Seroquel), and olanzapine (Zyprexa). Olanzapine and quetiapine

are rated L2. Risperidone has a risk category of L3. All have a C rating for use during pregnancy.

Summary

Although medications are not the central treatment modality for PTSD, they can be helpful in women's recovery. Medications can be used safely in pregnant and breastfeeding women with trauma symptoms and there are safer choices within each medication category. Medications can also be used in addition to traditional trauma treatments, such as EMDR, psychotherapy, peer support, and psychoeducation.

Table 3
Pregnancy and Lactation Risk Categories for Medications for PTSD

Medication Classification	Medication Names	Pregnancy Risk Category	Lactation Risk Category	Symptoms Addressed
Selective Serotonin Reuptake Inhibitors (SSRIs)	Sertraline (Zoloft)	С	L2	Well-tolerated; addresses comorbid symptoms; lead to global improvement and enhanced quality of life
	Escitalopram (Lexapro)	С	L2	
	Paroxetine (Paxil)	D	L2	
	Fluoxetine (Prozac)	С	L2	
	Citalopram (Celexa)	С	L2	
Mixed-function Antidepressants	Venlafaxine (Effexor)	С	L3	Demonstrated efficacy in PTSD
	Mirtazepine (Loniten)	С	L3	,
Serotonin-2 Antagonists/Reuptake Inhibitors (SARIs)	Trazodone (Desryl)	С	L2	Lowers incidence of nighmares by reducing REM sleep. Sedating, mothers cannot bedshare with their babies while on this medication.
Adrenergic agents	-2 adrenergic antagonists (prazosin, clonidine, guanfacine)	C, C, B	L4	Blocks norepinephrine, decrease nightmares and intrusive thoughts.
			L3	
			L3	
	-adrenergic blockers (propranolol)			Acute administration may prevent long-term symptoms. Some concern about this medication when there is
			L2	co-morbid depression.
			L2	
Atypical Antipsychotics	Olanzapine	С	L2	These can be useful adjuncts for co- occurring psychotic symptoms or when first-line medications have failed.
	Quetiapine	С	L2	
	Risperidone	С	L3	Can also help with extreme hypervigilance/paranoia, physical aggression, trauma-related hallucinations











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