MC3 for moms

Psychopharmacology Reference Cards





MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN
DEPARTMENT OF PSYCHIATRY

Antidepressants

Generic (Trade)	S: start dose(mg), T: target dose(mg/day)	Titration Schedule	N: Notes; S: side effects; R: risks	P: pregnancy data; L: lactation data
Fluoxetine (Prozac)	S: 10, T: 20-60	10mg q 2 weeks	N: long half-life—self tapering; S: can be activating	L: likely greater amount in breast milk (10%) although this does not correlate with harmful effects
Sertraline (Zoloft)	S: 25-50, T: 100-200	25-50mg q 2 weeks	S: can be activating or sedating or cause emotional numbing; more GI effects than others	L: negligible amounts transmitted into breast milk (<1%)
Escitalopram (Lexapro)	S: 5, T: 10-20	5-10mg q 2 weeks	N: quite well tolerated	
Citalopram (Celexa)	S: 10, T: 20-60	10mg q 2 weeks	S: due to warnings about inc. Qtc, may consider getting EKG at doses above 40mg	
Mirtazapine (Remeron)	S: 7.5, T: 15-45	7.5mg q 2 weeks	N: causes sedation and increased appetite—helpful for anxious/depressed patients with insomnia who are not eating; S: weight gain	
Duloxetine (Cymbalta)	S: 30, T: 60-120	30mg q 2 weeks	N: helpful for chronic/neuropathic pain	P/L: less data than SSRI's but no significant documented risks—use second line
Venlafaxine (Effexor, Effexor XR)	S: 75, T: 150-300	XR: 75mg q 2 weeks Non XR: 37.5mg q 2 weeks	S: may cause hypertension, XR less likely to cause withdrawal when tapered	P/L: less data available than SSRI's, with no significant documented risks
Bupropion (Wellbutrin SR, Wellbutrin XL, Zyban)	S: 150, T: 150-450, SR BID dosing	150mg q 2 weeks	N: activating properties help with low energy/motivation/lack of focus. Can be used alone or to augment SSRI/SNRI; S: can increase anxiety and lowers seizure threshold	P: Not to exceed 450 mg (seizure risk), greater concern for seizure in those with a history of seizure or those engaging in purging behaviors. Helpful for smoking cessation in pregnancy. May help ADHD and other addictive disorders, such as overeating in pregnancy.
Paroxetine (Paxil, Paxil CR)	S: 10, T: 20-40 CR: 25	10mg q 2 weeks CR: 12.5 mg q 2 weeks	S: can be sedating, cause withdrawal effects due to short half life, CR form less likely to cause withdrawal when tapered	P: Older data demonstrated potential for a 1.5- to 2.0-fold increase risk in cardiovascular malformations, leading to a 2005 warning. Recent data show no consistent information to support teratogenic risks.

Antidepressants General Safety and References

General safety data	Generally speaking, the literature shows that antidepressant use during pregnancy (as compared to untreated depression/anxiety during pregnancy), does not increase the risk of 1) congenital abnormalities, 2) preterm birth, or 3) babies being small for gestational age. Furthermore, there is no data to support that children exposed to antidepressants have increased rates of neurodevelopmental problems long term. There is some data that infants born to mothers have higher rates of poor neonatal adaptation syndrome (babies being fussy/jittery soon after delivery); however symptoms of this, if they occur at all, are generally mild and short-lived. Persistent pulmonary hypertension in newborns is sometimes listed as a potential side effect of in utero antidepressant exposure; however, the condition is very rare.
References:	"Pharmacologic Treatment of Perinatal Depression. Mary C. Kimmel, MD, Elizabeth Cox, MD, Crystal Schiller, PhD, Edith Gettes, MD, Samantha Meltzer-Brody, MD, MPH. Obstet Gynecol Clin N Am 45, pages 419–440, published 2018. ttps://doi.org/10.1016/j.ogc.2018.04.007"

Mood Stabilizers

Generic (Trade)	S: start dose(mg), T: target dose(mg/day)	Titration Schedule	N: Notes; S: side effects; R: risks	P: pregnancy data; L: lactation data
Lithium (Eskalith, Lithobid)	S: 150-300, T: 900-1200, blood level 0.6-1.2 mEq/L	150-300mg q 3-7 days	N: narrow therapeutic window; S: thyroid malfunction, toxicity with NSAID's, GI upset	P: small increase cardiac malformations (1.15 % vs 1.9%), need to carefully monitor levels during pregnancy, delivery due to shifts in blood volume; L: high rate of excretion into breastmilk; breastfeeding not recommended or if mom wants to BF need to monitor carefully baby for tox effects (sedation, feeding problems, lethargy, seizures) and measure blood levels
Valproic acid (Depakote, Depakene) **DO NOT PRESCRIBE TO WOMEN OF CHILDBEARING AGE**	S: 250-500, T: 500-1000, blood level 50-120 mg/L	250-500mg q 3-4 days	S: weight gain, hair loss; R: hepatitis, pancreatitis	P: risk of neural tube defects 10% esp in 1st trimester (as well as facial and cardiac abnormalities), IUGR, mental retardation, neonatal toxicity, not recommended; L: theoretical risk infant hepatotoxicity /thromobocytopenia
Carbamazepine (Tegretol) **DO NOT PRESCRIBE IN PREGNANCY/BF MOTHERS**	S: 100mg, T: 300-1200	100mg q 5-7 days	S: glaucoma; R: Stevens–Johnson syndrome, agranulocytosis	P: risk of defects 6% (neural tube, craniofacial), risk fetal vitamin K deficiency/bleeding, IUGR, neonatal toxicity; L: high levels in breastmilk-need to monitor baby's bloodwork
Lamotrigine (Lamictal) regarded as first choice for mood stabilization, esp for bipolar depression	S: 25, T: 200 (as 100mg bid)	25mg/day x 2wks, then 50mg/day x 2 weeks, then 100mg/day x 2 weeks, then 100mg bid	R: Stevens–Johnson syndrome	P: no increased risk of malformation, some risk for neonatal toxicity (rare); L: infant levels are 30% of mom's dose; theoretical risk of SJS but no cases reported; not absolute contraindication for BF
Topiramate (Topamax)	S: 25-50, T: 50-400	25-50mg q 3-7 days	S: sedating; R: increased ammonia, metabolic acidosis, glaucoma, kidney stones	P: some reports of increased risk of cleft palate, low birth weight; L: small case series showed no adverse effects

Mood Stabilizers General Safety and References

General safety data	Because medications in this class have more risk associated with them and less data than other medications, decisions about using them in pregnancy should be made as a team by the mother and the physician. Benefits and risks should be weighed and ultimately, if a patient has historically only done well on medications with higher risk of teratogenicity, it may be reasonable to continue that medication.
References:	Larsen ER & Saric K. Pregnancy and bipolar disorder: the risk of recurrence when discontinuing treatment with mood stabilizers: a systematic review. Acta Neuropsychiatr. 29(5): pages 259-266, published 2017.

Antipsychotics/Neuroleptics

Generic (Trade)	S: start dose(mg), T: target dose(mg/day)	Titration Schedule	N: Notes; S: side effects; R: risks	P: pregnancy data; L: lactation data
Risperidone (Risperdal)	S: 0.5-1, T: 1-6	0.5-1mg q 3-5 days	S: ↑prolactin, ↑metabolic risk	
Aripiprazole (Abilify)	S: 1, T: 2-15	1-5mg q 3-5 days	S: akathisia	L: may decrease breastmilk supply
Ziprasidone (Geodon)	S: 20 QD, T: 20 BID - 60 BID	20mg BID q 3-5 days	N: relatively weight neutral; S: ↑Qtc	
Quetiapine (Seroquel)	S: 12.5-25, T: 12.5-300	12.5-50mg q 3-5 days	N: may use in small doses as PRN for anxiety (ie 12.5mg TID PRN), moderate doses for sleep aid (25-50mg), higher doses for mood stabilization (100-300mg); S: sedation, weight gain	P: has lots of safety data; best risk/benefit ratio
Olanzapine (Zyprexa)	S: 2.5, T: 2.5-10	2.5-5mg q 3-5 days	S: ↑metabolic risk, sedation	P: has most safety data
Paliperidone (Invega)	S: 1, T: 3-9	1-2mg q 3-5 days	S: ↑prolactin	
Lurasidone (Latuda)	S: 20, T: 40-120	20mg q 3-5 days	N: must be taken with at least 350cal meal; S: some sedation	
General safety data/Reference	Antipsychotics have been shown to confer no increased risk of congenital malformations to babies exposed to them in utero, with the exception of risperidone, which seemed to confer some increased risk of overall and cardiac malformations (RR 1.26) (Huybrechts KF, Hernández-Díaz S, Patorno E, et al. Antipsychotic Use in Pregnancy and the Risk for Congenital Malformations. JAMA Psychiatry. 2016;73(9):938–946). Less data is available on the effect of these medications on potential pregnancy complications.			

Anxiolytics and Sleep Aids (1)

Generic (Trade)	S: start dose(mg), M: maximum dose(mg/day)	Frequency	N: Notes; S: side effects; R: risks	P: pregnancy data; L: lactation data
Alprazolam (Xanax) DO NOT USE	S: 0.25-0.5, M: 1 TID		N: recommend not to use this short acting medication due to increased risk of rebound anxiety and tolerance/addiction	P: avoid in first TM to prevent potential for malformation (risk less than 0.7%), and use low dose in late pregnancy or BF . (risk with high doses near time of delivery--floppy baby syndrome and infant sedation) L: ok in small doses, in high doses risk infant sedation
Lorazepam (Ativan)	S: 0.25-0.5, M: 1 TID	May take up to 3x/day; prefer standing dosing over PRN	N: highly effective, especially upon initiation of SSRI, for anxiety and for rumination	same as above
Clonazepam (Klonopin)	S: 0.25-0.5, M: 1 TID	May take up to 3x/day; prefer standing dosing over PRN	N: longer acting than Ativan-may provide better coverage for consistently highly anxious patients; Highly effective, especially upon initiation of SSRI, for anxiety and for rumination	same as above
Zolpidem (Ambien)	S: 5, M: 10	Bedtime	N: patient may sleep walk Rapid onset of action	P: limited data, but so far no evidence for increased risk of malformation; L: OK in small doses as low transfer to BM
Gabapentin (Neurontin)	S: 100, M: 900 TID	May take up to 3x/day, PRN	N: good option for patient with history of substance abuse; S: few to no side effects	P: limited data but so far no evidence for increased risk of malformation;

Anxiolytics and Sleep Aids (2)

Generic (Trade)	S: start dose(mg), M: max dose(mg)	Frequency	N: Notes; S: side effects; R: risks	P: pregnancy data; L: lactation data
Desyrel (Trazodone)	S: 25, M: 150	At bedtime PRN	S: few with exception of potential grogginess; no addictive potential	P: safe (similar profile to SSRI's); L: safe (similar profile to SSRI's)
Diphenhydramine (Benadryl) **Doxylamine (Unisom)**	S: 25, M: 50 S: 25, M: 25	At bedtime PRN	S: few with exception of potential grogginess; no addictive potential	P: ok for occasional use; L: can interfere with lactation, generally safe in occasional small doses
Melatonin	S: 1-3, M: 5	At bedtime (or a little before), PRN	S: few with exception of potential grogginess	P: limited data thus use with caution, but no major risk for malformation, L: safe
Quetiapine (Seroquel)	S: 12.5, M: 50 TID	May take up to 3x/day, PRN	N: good option for patient with history of substance abuse; S: sedation, weight gain	P/L: see slide on antipsychotics
General information	Anti-anxiety medication taken on an as needed basis can play an important role in perinatal psychiatry due to the severity of anxiety that can be experienced during the perinatal period. Because most all anxiolytic medications can have a side effect of sedation, counsel patients to take first doses when someone else is present, if possible. Let patients know that you plan to eventually taper off of this medication. Preferentially prescribe long-acting anxiolytics as standing dose (over as needed delivery).			
	Sleeping medications can be quite useful in the perinatal period given the frequent complaint of insomnia. Many women are understandably worried about taking these medications for fear of not waking up when the baby wakes in the night. For this reason we reassure patients that we are starting at the lowest doses and suggest that they try these medications when someone else is present who could wake up with the baby if needed.			

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The information on these cards is intended to offer general guidelines on psychotropic medications used to treat behavioral health conditions. It is not a substitute for specific professional medical advice.

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