



EMORY WMHP BLOG

Hale's Breastfeeding Safety Ratings: Part 4 – Stimulants & ADD Medications

Thomas Hale's *Medications and Mothers' Milk*, now in its 14th edition, has become the standard reference for the breastfeeding safety of medications. In this series, we provide a summary of Dr. Hale's ratings and recommendations for the major classes of psychiatric medications. In this entry in the series, we summarize Dr. Hale's findings regarding the safety of ***Stimulants & Attention Deficit Disorder Medications*** during breastfeeding.

Lactation Category	Generic Name	Brand Name(s)	Medication Class	Relative Infant Dose
L2 - Safer				
L2	N/A	N/A		
L3 – Moderately Safe				
L3	Clonidine ¹	Catapres	Non-stimulant	0.01% - 7.1%
L3	Dexmethylphenidate ²	Focalin	Stimulant	0.2% - 0.4%
L3	Dextroamphetamine	Dexedrine, Dextrostat	Stimulant	1.8% - 6.9%
L3	Guanfacine ¹	Intuniv, Tenex	Non-stimulant	Not reported
L3	Lisdexamfetamine ³	Vyvanse	Stimulant	1.8% - 6.9%
L3	Methylphenidate	Concerta, Daytrana, Metadate, Ritalin	Stimulant	0.2% - 0.4%
L3	Mixed amphetamine ³	Adderall	Stimulant	1.8% - 6.9%
L4 – Possibly Hazardous				
L4	Atomoxetine	Strattera	Non-stimulant	Not reported
L4	Modafinil	Provigil	Stimulant ⁴	Not reported
L5 - Contraindicated				
L5	Methamphetamine	Desoxyn	Stimulant	Not reported
Unrated				
Unrated	Armodafinil	Nuvigil	Stimulant ⁴	Not reported

¹Clonidine and guanfacine have each been used for decades to manage hypertension. They have also been used off-label to manage ADD/ADHD. Guanfacine recently received FDA approval for treatment of ADD; however, clonidine still has no FDA approval for ADD. ²Dexmethylphenidate is included in Hale's methylphenidate report. ³Lisdexamfetamine and mixed amphetamine salts are included in Hale's dextroamphetamine report. ⁴Modafinil and Armodafinil (Nuvigil) are stimulants used to treat narcolepsy. They do not have FDA indications for the treatment of ADD.

Additional Thoughts from the Emory WMHP

- **Clonidine, Guanfacine & Blood Pressure** – As antihypertensives, clonidine and guanfacine may lower blood pressure in nursing infants. Nursing infants exposed to clonidine and guanfacine should be monitored for low blood pressure, sedation, and weakness.
- **Stimulant Monitoring** – Nursing infants exposed to stimulants should be monitored for insomnia, poor appetite, weight loss, and irritability; however, none of the existing studies have reported these complications.
- **Stimulants & Milk Production** – All stimulants increase dopamine activity. In addition to its effects as a neurotransmitter, dopamine also acts as a hormone to lower levels of another hormone, prolactin. As a result, stimulants may lower prolactin levels and thereby lower breast milk production.
- **Atomoxetine Metabolism** – Approximately 1 in 14 individuals are genetically-determined poor metabolizers of atomoxetine. The half-life of atomoxetine may be over 4 times longer among poor metabolizers. As a result, plasma levels of atomoxetine in nursing infants who are poor metabolizers may be much higher than anticipated.