Methylphenidate (Ritalin®, Concerta®)

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to methylphenidate may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

What is methylphenidate?

Methylphenidate is a stimulant medication used to treat Attention Deficit Hyperactivity Disorder (ADHD) and sleep disorders. It may also be used to help with Attention Deficit Disorder (ADD) and to suppress appetite. ADD and ADHD are chronic conditions, often diagnosed in childhood. For people with attention disorders, stimulant medications can improve alertness and attention span, help in completing tasks and following directions, decrease impulsive behavior and aggression, and produce a sense of calm. Some people will continue to take their medications into adulthood because they help with school and work performance and improve social interactions.

Methylphenidate is sold under different brand names, including Ritalin® and Concerta®. A transdermal (skin) patch called Daytrana® is approved for children and adolescents. There are two forms of methylphenidate currently on the market: immediate-release, meaning the drug begins to work right away and may need to be taken again within several hours, and extended-release, meaning the drug is taken in the morning and effects last until late afternoon.

Will it be harder for me to get pregnant if I keep taking methylphenidate?

No studies have been published on human fertility following methylphenidate treatment. Animal studies do not show negative effects on fertility at doses up to 200 times the maximum dose given to humans.

I just found out that I’m pregnant. Should I stop taking methylphenidate?

No. It’s important to speak with your healthcare provider before stopping any medication, especially while pregnant.

Stopping methylphenidate can affect your daily life, and could lead to difficulties in working, sleeping, and getting along with others. Sometimes people who take methylphenidate feel less hungry, and when combined with pregnancy this might lead to too little weight gain for pregnancy. Weight loss is generally not advised for pregnant women. Changes in your body while pregnant can mean that your daily dose of methylphenidate may need to be adjusted (changed) to treat your health condition. Lastly, stimulants like methylphenidate can affect your heart rate and blood pressure. Talk to your healthcare provider about ways to monitor (watch for) these symptoms in your pregnancy.

Can taking methylphenidate increase the chance for a miscarriage?

One small study found a small increased chance for miscarriage. More studies are needed to determine if there is an association.

Will my baby be born with birth defects if I take methylphenidate while pregnant?
Based on published research of about 2,200 pregnancies, this medication is not likely to increase the chance of birth defects. Most studies have reported healthy babies delivered at full-term after exposure to methylphenidate. While one large database study suggested an increased risk for heart defects when a mom takes methylphenidate during pregnancy, other studies have not. More studies are needed to assess whether methylphenidate use increases the chance for birth defects. As with all medications, it is best to use the lowest dose that works for you during pregnancy. Research has not been done on Daytrana® (the patch) and pregnancy.

Can taking methylphenidate during pregnancy cause other pregnancy complications?
Limited research does not suggest an increased chance for premature birth, or low birth weight when a woman takes methylphenidate as prescribed while pregnant.
Some babies exposed to stimulants close to the time of delivery may show temporary signs of withdrawal after they are born, but this hasn’t been seen with use of methylphenidate when taken as prescribed.

Are there any long-term effects for children exposed to methylphenidate prenatally?
There hasn’t been enough research on children exposed prenatally to methylphenidate, but limited studies have shown normal growth and development among children studied up to 1 year of age.

Can I breastfeed while taking methylphenidate?
Yes. Methylphenidate passes into breast milk at low levels. When nursing mothers take it as prescribed, methylphenidate is not expected to cause problems for a nursing infant. Reports on 5 nursing infants, whose mothers were taking doses from 35-80mg per day, reported normal infant weight as well as normal sleeping and feeding habits. Breastfeeding studies haven’t been done with Daytrana®. It is important to talk to your health care provider about all of your breastfeeding questions.

My baby’s father was using methylphenidate when I got pregnant. Should I be concerned?
There is no information to suggest that stimulants in semen increase the risk of birth defects. For most medications, including methylphenidate, it is unlikely that a father’s exposure before conception or during the pregnancy will negatively affect the fetus or cause other problems. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/.

References Available Upon Request