Examining Migraine Medications during Pregnancy Doesn't Have to be a Headache

Migraine headaches affect one billion people worldwide. Migraines are more common in people who could become pregnant, and during pregnancy their frequency can increase, decrease, or stay the same. Last year we talked to Caroline about treating her migraine headache at five months of pregnancy. Now she has reached out to us to discuss treatment options before she tries to get pregnant again. Back when she was pregnant with her first child, she was using acetaminophen and sumatriptan, but found that her migraines were much less responsive to these products over time. Today, Caroline is considering the newer drugs that have come onto the market since her last pregnancy. She has never used a preventive medication and was curious about the data on the new products. Caroline's healthcare provider has mentioned trying Emgality® (galcanezumab-gnlm) or Nurtec ODT® (rimegepant).

Since there are many new drugs marketed to treat and prevent migraines, let us start with an overview. These newer medications are called calcitonin gene-related peptide (CGRP) antagonists, CGRP receptor blockers and CGRP blockers, and are a new category of migraine treatments. Some treat migraine attacks, while some prevent migraines, and some do both (like those Caroline is interested in).

There are so many choices, so let's look at what the data says when these medications are studied during pregnancy.

Medications that *prevent* chronic migraines:

- Qulipta® (atogepant) – oral; CGRP receptor antagonist
- Ajovy® (fremanezumab-vfrm)-injection; CGRP blocker
- Vyepti® (eptinezumab-jjmr)- injection; CGRP receptor blocker
- Aimovig® (erenumab-aooe)- injection; CGRP receptor blocker
- Emgality® (galcanezumab-gnlm)- injection; CGRP blocker
- Nurtec ODT® (rimegepant)- tabs; CGRP receptor antagonist

Medications that *treat* the symptoms of acute migraines:

- Emgality®(galcanezumab-gnlm) – injection; CGRP blocker
- Nurtec ODT® (rimegepant)- tabs; CGRP receptor antagonist
- Ubrelvy® (ubrogepant)- oral; CGRP receptor antagonist

Medications that *prevent* and *treat* migraines:

- Emgality®(galcanezumab-gnlm) – injection; CGRP blocker
- Nurtec ODT® (rimegepant)- tabs; CGRP receptor antagonist

Unfortunately, there is very little information involving human data on Quilipta®, Nurtec ODT® or Ubrelvy® so we are left without the information we need for a full risk assessment of these medications. However, there are some data in humans on the medications on Ajovy®, Vyepti®, Aimovig® and Emgality®. These data are limited, meaning we don't have a lot of information.

Let's begin by breaking down the information that we have on Ajovy®, Vyepti®, Aimovig® and Emgality®. These four medications are all monoclonal antibodies, which in scientific terms means they are extremely large molecules. That means that they are unlikely to cross the placenta until around mid-pregnancy after the baby's structures and organs have developed. Therefore, these medications should not have a direct impact on the baby's development. It cannot be said that there is no increased chance of the baby being affected, but these medications may not be high risk exposures. These medications stay in the person's system for a very long time. So if Caroline would like to have any of these out of her system before she gets pregnant, it may take approximately 5 months to clear.

What are the specific reports that we have on Ajovy®, Vyepti®, Aimovig® and Emgality® that help us assess the risk of use in pregnancy?

There are 13 cases of exposure prior to pregnancy and 10 exposures during pregnancy in one report on Ajovy®

(fremanezumab-vfrm). In these cases, there was no increase in pregnancy loss, and one child was born with kidney and GI issues that cannot be proven to be caused by the medication treatment at this time.

There are two cases of Vyepti® (eptinezumab-jjmr) use during pregnancy. Outcome was reported on only one pregnancy which resulted in a miscarriage. However, based on what we know about monoclonal antibodies and the size of this molecule potentially being too large to pass through the placenta, it also would not be expected to have an increased risk of problems when used in the first trimester. More data and studies are needed to support this statement, though.

There are 116 cases of Aimovig® (erenumab-aooe) in one report. These studies include one prior to pregnancy, 108 during pregnancy, five during lactation and two at an unknown time. There was no increase in pregnancy loss or pattern of birth defects seen in the cases with known outcome. There were six cases of early birth in this group. One infant had growth issues but that mother was on multiple medications. There are at least five other cases in the medical literature that resulted in infants born without adverse pregnancy outcome or birth defects.

Finally Emgality® (galcanezumab-gnlm) was suggested to Caroline. There are 125 cases with data to consider. Six cases were with use of the medication prior to pregnancy, 107 cases were with use during pregnancy, 5 were with use during lactation and 1 case was use of the medication by dad. Six cases had unknown timing of use. No increase chance for pregnancy loss or pattern of birth defects was reported in this group of cases.

Back to our call with Caroline, and how we advised her on the medications that she was interested in – remember these: Nurtec ODT® and Emgality®. Both of the choices offered to Caroline can treat ***and*** prevent migraines, so one doesn't have an advantage over the other in that area. We discussed with Caroline that at this time there are no human studies on Nurtec ODT®. However, the animal data looks promising and low risk at this time. Additionally, it is a drug that quickly clears from the body. So she would not have to be off of it for months to have it clear from her body prior to pregnancy. In that time, there may be new human data reported that we could share with her closer to when she would try to conceive. Otherwise, the current human data on Emgality® looks promising. Caroline stated she plans to discuss these reproductive data with her prescribing healthcare provider and come up with a plan of action. Caroline may decide to try either of these medications now see how they work for her before trying to get pregnant knowing there may be waiting periods to have the medications clear from her body.

At the end of the day, dealing with a migraine might be a pain, but examining up-to-date data doesn't have to be a headache. That's why MotherToBaby is here to help!

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

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Welcome, spring! Did someone say wildflowers? (***AHHH…) T***rees? ***(AHHH…) Gr***asses? ***(CHOO!) Ugh!*** While many people enjoy renewed energy brought on by the bursting forth of spring color, others feel only the misery of seasonal allergies due to pollen, mold, and other springtime triggers. Combine seasonal allergy symptoms with pregnancy, and you can end up short on sleep, long on fatigue, and with an increased chance of respiratory complications if you have asthma. None of these things are good for you or your baby, and keeping asthma symptoms under control is especially important during pregnancy.

Wash Your Cares Away

A simple over-the-counter (OTC) saline nose spray can rinse pollen, dust, and other allergy triggers from your nose. This option is not expected to result in an exposure for the pregnancy or to increase pregnancy risks.

Sleep, Magical Sleep

To help you sleep better, consider using OTC nasal strips to open your nasal passages at night. Use a pillow cover to reduce dust and other allergens. Also try sleeping with your head slightly elevated to help drain the sinuses and reduce inflammation.

Still Suffering?

It may be worth having a conversation with your healthcare provider about the pros and cons of various allergy medications. Before grabbing an over-the-counter medication to treat your symptoms, consider this:

- With any medication, take the time to read your labels. Some allergy medications marketed for cough and cold contain alcohol, which should be avoided during pregnancy. Also, multi-symptom formulas might contain additional medications that you don't need. As with any medication in pregnancy, use allergy medications for the shortest amount of time needed, and follow dosing instructions carefully.
- **Antihistamines:** Older antihistamines like diphenhydramine (sold under the name Benadryl® and other brands) and chlorpheniramine can make you sleepy, so they aren't ideal for daytime use. Newer antihistamines, such as cetirizine (Zyrtec®), fexofenadine (Allegra®), and loratadine (Claritin®), are less likely to make you drowsy and have not been shown to increase the chance of birth defects or other pregnancy complications when used as directed.
- **Eye drops:** Allergy eye drops may contain antihistamines, steroid medications, or other active ingredients. Eye drops result in lower exposure for the pregnancy than oral (swallowed) medications do. However, some eye drops have been better studied for use in pregnancy than others have. Check with your healthcare provider or

contact a MotherToBaby specialist for questions about your specific eye drop.

- **Steroid nasal sprays:** OTC options include budesonide, fluticasone, and triamcinolone (you can find the active ingredients listed on the label). Some older studies suggested that using oral steroid medications might increase the chance of cleft lip or palate and affect the baby's growth, but newer studies don't find this to be true. In addition, nasal sprays are not well absorbed into the bloodstream when used as recommended, so there is less exposure for the pregnancy. Compared to some other nasal spray ingredients, fluticasone might be absorbed in greater amounts, but these still would not reach the amounts seen with oral medications. No increased pregnancy risks have been seen specifically with OTC steroid nasal sprays.
- **Decongestants:** The overall research does not suggest that using decongestants for a short time would increase pregnancy risks. However, decongestants work by temporarily making the blood vessels narrower. There are concerns that this could limit the supply of oxygen to the placenta and the developing baby. Some healthcare providers recommend avoiding decongestants in the first trimester, and using them with caution any time in pregnancy. Short term use (3 days or less) of nasal spray decongestants results in less exposure for the pregnancy than oral decongestants do.
- **Allergy shots**: Most reactions to allergy shots (redness, swelling, itching) are not dangerous. If someone is already receiving allergy shots before they get pregnant, there is no general recommendation to stop during the pregnancy. However, there is a small chance that a person could have a life-threatening allergic reaction (anaphylaxis) if they are new to allergy shots or are building up their dose. For this reason, it is not recommended to start getting allergy shots for the first time or to increase the dose during pregnancy.

If you have questions about specific allergy medications during pregnancy, including those available by prescription, talk to your healthcare provider or contact us at MotherToBaby. Happy spring!

Select References:

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