Birth Defects vs. Chromosomal Abnormalities: What's the Difference?

Sara contacted us on the MotherToBaby live chat service after being referred by her OB/GYN who had told her that the Paxil (drug name paroxetine) she was taking could cause a heart defect. She was 14 weeks along and wanted to learn more, but was confused because all her genetic testing results had come back normal. She asked: "How could my baby have a heart defect if my non-invasive prenatal testing (NIPT) was negative?"

During pregnancy, there are many tests done to check on the health and development of your baby. It can be difficult to keep track of what they are all looking for and why they are important. To understand these tests, it can be helpful to know the differences between a birth defect and a chromosomal abnormality and what they each mean for the health of your baby.

All pregnancies have a background risk for birth defects of 3-5%, but certain exposures can increase the risk of birth defects above this background estimate. Most birth defects occur during the first trimester while the baby is growing and developing. A certain body part – such as the heart, brain, or limbs – might not develop correctly, and the baby's body may look or function differently than it should. You may have heard of a baby being born with a hole in the heart, or with something called a cleft lip. These are two examples of birth defects that can occur during pregnancy. Birth defects can range from mild to severe, and the health of the baby will be dependent on where the birth defect occurs and how severe the problem is.

Certain tests done during pregnancy can look at your baby to see if there are birth defects. For example, most pregnant individuals will go in for an anatomy scan between 18 and 22 weeks where the healthcare provider will look at the baby using an ultrasound. Most people know this as the time when they can learn the gender of the baby, but the ultrasound will also take a detailed look at the baby's organs and body parts, including the heart, brain, face, and stomach, to check for birth defects. While this is an important screening test, it is not perfect, and more minor defects may go unnoticed until birth.

Chromosomal abnormalities are changes in the baby's DNA that happen at the time of conception. The best way to understand DNA is to think of it like a recipe book that holds all the recipes for the growth and development of different body parts. If a certain recipe calls for one stick of butter, but the printed book accidentally says two sticks of butter, the recipe will turn out different. In the same way, sometimes people have extra or missing amounts of DNA that can cause changes in development. For example, people who have a chromosomal abnormality known as Down syndrome have three copies of their 21st chromosome rather than only two. This extra amount of DNA is what causes the developmental differences in individuals with Down syndrome.

During your pregnancy, your healthcare provider may suggest that you meet with a genetic counselor to have non-invasive prenatal testing, or NIPT, performed. This test can be done as early as 10 weeks. During pregnancy, some of the baby's DNA enters the pregnant woman's bloodstream. By taking a small blood sample from mom, a lab can take a look at the baby's DNA and tell if they have certain chromosomal abnormalities, such as Down syndrome. When you meet with a genetic counselor, they will go over all of the pros and cons of this test as well as your family history, and will meet with you again to review the results.

Back on the live chat service, Sara asked: "So because my NIPT results were normal, the baby is unlikely to have a chromosomal abnormality. However, a birth defect still could have happened in the first trimester, and I need to wait until my anatomy scan to get those results, is that right?" That's exactly right, I replied. I then went on to explain that

although Paxil (paroxetine) has been shown to increase the risk for heart defects in some studies, other studies do not suggest a risk, so the overall chance of the baby being affected is low.

As we ended our chat, Sara shared that she was feeling much more knowledgeable about the difference between a birth defect and a chromosomal abnormality. She was able to breathe a sigh of relief that her NIPT results came back normal, indicating a low risk for conditions like Down syndrome. She also felt much more confident heading to her anatomy scan in a few weeks knowing that this test, while not perfect, would be the best way to identify birth defects before her baby is born.

If you have any questions about birth defects or exposures during pregnancy, speak with a MotherToBaby specialist via phone, text, live chat, or email. For any questions regarding genetic testing in pregnancy, or to find a genetic counselor in your area, visit the Find a Genetic Counselor page on the National Society of Genetic Counselors website: https://findageneticcounselor.nsgc.org/

Birth Defects vs. Chromosomal Abnormalities: What’s the Difference?

By: Kirstie Perrotta, MPH and Becky Spencer, PhD, APRN, PMHNP-BC, IBCLC, PMH-C, FILCA

Shannon was newly pregnant and had been referred to MotherToBaby by her doctor. She was taking 50 mg of sertraline per day for general anxiety and her doctor thought that she may need to wean off the medication now that she was 5 weeks pregnant. Shannon had been taking the medication for 3 years and was feeling great on her current dose, so she had some concerns about this plan. On the MotherToBaby website’s live chat service, Shannon was

connected with me, a teratogen information specialist, where she asked “Do I really need to stop my anxiety medication, or could I just continue on a lower dose?”

I started by addressing the importance of weighing the risks vs. benefits of taking any mental health medication during pregnancy. Sertraline is very well studied and has not been associated with a risk for birth defects, but does have the potential to cause neonatal adaptation syndrome or withdrawal approximately 10-30% of the time and persistent pulmonary hypertension in less than 1% of exposed infants. On the other hand, we know that untreated anxiety can also cause problems for the pregnancy, including an increased risk for preterm delivery. For many patients, the benefits of staying on a medication like sertraline outweigh the potential risks, but each case is unique and ultimately the patient needs to decide what they are most comfortable with.

Getting to Shannon’s next question about dose, I shared that although many pregnant women feel they need to decrease their dose once they get a positive pregnancy test, the opposite is in fact true. During pregnancy, there are many changes that occur including weight gain, increased blood volume and enlargement of the kidneys. On the outside, things won’t look much different, but research shows these changes happen soon after conception. This means that medication doses that previously worked well to control a condition become “diluted,” in a sense, and may not be as effective. In some cases, women need to actually increase their dose to continue to control the disease.

To learn more about how bodily changes during pregnancy impact medication dosing, we turn to Becky Spencer, PhD, APRN, PMHNP-BC, IBCLC, PMH-C, a psychiatric nurse practitioner who specializes in perinatal mental health at Texas Women’s University with some more questions about this fascinating phenomenon.

Q. Can you tell us a little more about what is happening in the body during pregnancy and why medications become less effective?

Becky Spencer: You are correct, Kirstie, that pregnancy has a significant impact on drug absorption, which is how a drug is transported into the bloodstream, drug distribution, which is the disbursement of a drug as it moves through the blood and tissues of the body, and drug metabolism, which is the process by which the body breaks down and eliminates drugs or other substances. During pregnancy, especially later in pregnancy, drug absorption from the stomach into the bloodstream is decreased due to slower gastric emptying and slower movement of the bowel and colon, so it can take longer for a medication to be absorbed and get to work.

A pregnant woman’s blood volume almost doubles during pregnancy which impacts drug distribution. With the dilution effect there is a lower concentration of medication in the blood plasma which results in less medication reaching the target tissues. Most drugs are metabolized in the liver or kidneys. During pregnancy, the increased blood flow to the kidneys results in an increased glomerular filtration rate (GFR), which means that medications are cleared from the bloodstream quicker, meaning the drug stays in the body less time. Similarly, hormone levels increase during pregnancy which increases the activity of various metabolic enzymes in the liver that metabolize drugs. When the liver metabolizes a drug more quickly there is less drug that reaches the target tissues.

What these changes mean for pregnant women who take medication for mood and anxiety disorders is that the dose of medication that they were taking before pregnancy may have a decreased effect during pregnancy, because the biological changes effectively decrease the amount of medication reaching the target tissues, in this case, the brain. Pregnant women may have an increase in mood and anxiety symptoms that they interpret as a worsening condition when, in fact, the decrease in circulating medication is the cause for an increase in symptoms.

Q. In your practice, how often do you see women increasing their mood medication dose? Does the dose need to be increased substantially?

Becky Spencer: That is a great question. The answer is that it depends on the type of medication, the specific condition (depression, anxiety, obsessive compulsive disorder, bipolar, etc.), and the severity of symptoms. Psychiatric providers typically increase medication dosages in gradual amounts until the patient has symptom relief or desired therapeutic effect. If a patient is experiencing a partial response to a medication (some improvement in mood and anxiety symptoms) best practice is to increase the dose of that medication before considering adding an additional medication.

Another question that I hear is whether or not dosages of medication should be based on achieving a specific blood plasma concentration level. The short answer is, for most medications, no. We don't routinely check blood plasma concentrations of most antidepressants because valid and reliable therapeutic plasma concentration ranges do not exist. Some mood stabilizing medications like valproate or lithium do require blood plasma monitoring both during pregnancy and outside of pregnancy. Euthymia, or stable mood, is the goal of medication dose adjustments for mood and anxiety disorders during pregnancy.

Q. What about after delivery? Does the dose need to be decreased right away?

Becky Spencer: It depends on the type of medication, and, to some extent, the symptoms that the patient is experiencing. The postpartum period is a vulnerable time for mood and anxiety disorders for several reasons including the significant hormonal shift that occurs after birth, lack of sleep, role adjustment to caring for a baby, and for some new parents, lack of necessary social and emotional support. Decreasing antidepressants too quickly after birth could exacerbate mood and anxiety symptoms during that very vulnerable time. The decision to decrease dosages of any medication prescribed for mood and anxiety disorders should be a collaborative decision between the patient and the provider. If decreasing mediation dose is desirable, it should occur gradually and any change in mood and anxiety symptoms should be reported to the provider. The one exception to this rule is for patients taking lithium. If lithium dosages were increased during pregnancy, they must be decreased to pre-pregnancy dosages after delivery.

Q. Shannon is asking about sertraline, an anti-anxiety medication, but are there other drugs that women need to also increase their dose of during pregnancy?

Becky Spencer: Any medications used to treat mood and anxiety disorders, including antidepressants, mood stabilizers, antipsychotics, and anti-anxiety medications, may need dose increases during pregnancy. The most important point is for pregnant women to monitor their mood and anxiety symptoms and report them to their provider. The decision to increase doses of medication should always be a collaborative decision between the patient and the healthcare prescriber.

Q. How should patients approach this conversation with their healthcare provider?

Becky Spencer: The decision to take any medication during pregnancy must be based on a discussion between healthcare providers and patients that takes into consideration the available research on the risks of specific medications AND the risks of untreated or undertreated mental conditions for both the pregnant woman and the baby. The risks of not treating mood and anxiety disorders during pregnancy are well documented and significant. Untreated or undertreated mood and anxiety disorders during pregnancy are associated with hypertension, preterm delivery, low birth weight, and long-term negative impacts on motor and cognitive development of the baby. Mental health conditions are the leading cause of maternal mortality in the United States. Effective treatment for mood and anxiety disorders in the perinatal period will literally save lives.

My top three tips for having a discussion with healthcare providers about medications for mood and anxiety disorders in the perinatal period include:

- Make an appointment with a psychiatric provider who specializes in perinatal mood and anxiety disorders or reproductive psychiatry. The provider directory on the Postpartum Support International website is a great place to find specialists in your state, and many provide telehealth services.

- If your obstetric provider is hesitant to treat your mood and anxiety symptoms, recommend that they make an appointment to speak with a psychiatric provider who specializes in treatment of perinatal mood and anxiety disorders during pregnancy at the Postpartum Support International Psychiatric Consult Line. This free service is staffed by perinatal psychiatrists who are available to share their skills and expertise and provide guidance to fellow medical professionals on prescribing medications during pregnancy and lactation.

- MotherToBaby Fact Sheets are an excellent resource and a great way to start a conversation with your provider about specific medications for mental health during pregnancy and lactation. I recommend that pregnant and lactating women who are taking medications for mood and anxiety disorders access and print out the MotherToBaby Fact Sheets for the medications that they are taking or are interested in learning more about, read them, jot down questions, and take them to their obstetric and/or psychiatric providers to start the conversation. Remember that you are your own best advocate for you and your baby's health.

Thanks so much for sharing your insight, Becky. It's always great to learn more about this topic.

Ultimately, Shannon decided to stick with her current dose for the first few weeks of pregnancy and make an appointment with her psychiatrist to discuss increasing her dose in a few weeks. In the meantime, she was planning to monitor her mood to make sure the anxiety remained well controlled.

If you have questions about mental health medications, dose, or any other exposures in pregnancy or lactation, please feel free to reach out to a MotherToBaby specialist via phone, chat, text, or email for more information. Additionally, you can visit our Mental Health Resource Hub to access fact sheets, blogs, and podcasts on mental health conditions and the medications used to treat them during pregnancy and breastfeeding.

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Birth Defects vs. Chromosomal Abnormalities: What's the Difference?

"I'm supposed to get dermal fillers tomorrow, is it still safe for me to get this procedure!?" Erin had booked this appointment with their dermatologist weeks ago, and while Erin was so excited today to learn that they were pregnant, they weren't sure if the fillers were still a good idea. Hopeful for smoother skin and less noticeable wrinkles, they called us for guidance. Erin isn't alone in having questions – MotherToBaby information specialists are often asked about getting cosmetic procedures during pregnancy or while breastfeeding.

Some cosmetic procedures require surgery; these are a type of plastic surgery. Examples include liposuction, breast augmentation, and rhinoplasty (nose). These types of cosmetic surgeries are best avoided while pregnant. But what about less invasive procedures? Let's look at some commonly asked about treatments:

Botox

Botox is an injectable form of botulinum toxin. When used cosmetically, Botox is typically injected in the face or neck to help smooth out wrinkles or fine lines in the skin by temporarily paralyzing or relaxing the muscles. Botox is expected to stay in the area where it is administered and not enter the bloodstream. Because of this, it is unlikely to enter breast milk or to cross the placenta where it could reach a developing baby. However, it is important to note that Botox hasn't been studied specifically for use during pregnancy or breastfeeding. There is also a risk for infection at the injection site, and the possibility that the toxin could spread beyond the area where it was administered. Read more about Botox here:
https://mothertobaby.org/baby-blog/botox-baby-what-we-know-about-the-risks-during-pregnancy-breastfeeding/

Semi-Permanent Makeup & Microblading

Semi-permanent makeup is achieved by tattooing areas of the face to highlight natural features and typically lasts for a few years before fading. This might include eye liner, lips, or eyebrows. Microblading is another form of tattooing used on the eyebrows. When it comes to the ink used in semi-permanent makeup, it isn't clear how much of the pigment in the ink is able to enter the blood stream, cross the placenta, or how much is able to reach the baby. For folks who are breastfeeding, it also isn't clear how much of the pigment might pass into breast milk. This makes it difficult to know if the pigment itself might cause a risk. We do know that with any tattoo, there is a possibility of

infection if the equipment is not sterilized properly. There can be a risk for Hepatitis B, Hepatitis C, HIV, and other infections like staph. There is also a possibility of infection during the healing process. If you do choose to get semi-permanent makeup while pregnant or breastfeeding, be sure to go somewhere that is practicing good hygiene. Also be sure to contact your healthcare provider if the tattooed area seems like it isn't healing correctly.

Teeth Whitening

Many people are also interested in brightening up their pearly whites. Some common teeth whitening products include whitening strips, whitening toothpastes, at home Blue (LED) Light Therapy, and professional whitening procedures administered by a dental hygienist or dentist. For the most part, these products are not expected to increase risks to a pregnancy or a breastfeeding baby. For more details about specific ingredients in teeth whitening products see: https://mothertobaby.org/baby-blog/whitening-teeth-during-pregnancy-or-breastfeeding-lets-bite-into-the-subject/

Chemical Peels

There are a few different types of cosmetic chemical peels that are used to address uneven skin tones, wrinkles, acne scarring, or sun damage by applying a product on the skin (topically) that then removes part of the upper layers of the skin. This usually involves a type of acid – it might be a combination of hyaluronic acid, glycolic acid, trichloroacetic acid, salicylic acid, or lactic acid and other ingredients. Light chemical peels involve the outer layer of skin (epidermis). Deep chemical peels can penetrate a bit further into the layers of your skin. Because the chemicals in each peel can vary, it can be a good idea to ask ahead of time for an ingredient list. A MotherToBaby specialist can talk with you about the active ingredients in the specific chemical peel you are considering. Read more about your skin & skin care here: https://mothertobaby.org/baby-blog/whats-the-skinny-on-skin-care

Lip Fillers & Dermal Fillers

Lip and dermal (or face) fillers are injected substances that are used to fill in lines and wrinkles or add volume to areas in the face or lips. There are currently four types of fillers that are approved by the Federal Drug Administration (FDA). Hyaluronic acid fillers are the most common. Hyaluronic acid, along with Calcium hydroxylapatite and Polylactic acid fillers are considered temporary – these will eventually be broken down and absorbed by the body. Polymethylmethacrylate is not absorbed by the body – this filler is made up of small round plastic beads suspended in collagen. So what do we know about the use of fillers during pregnancy or breastfeeding? The answer is not much. There is limited research on these substances when administered during pregnancy or while breastfeeding, so it may be best to pause any injections until a later date. There is also a potential risk for infection at the injection site. The FDA advises anyone interested in fillers to get them from a licensed healthcare provider and to discuss the risks and benefits with them before the procedure.

So, what did Erin do about their appointment for dermal fillers?

When it comes to cosmetic procedures while pregnant or breastfeeding, it is important to consider what is known about a procedure and weigh any potential risks. In Erin's case, they decided it would be best to wait to reschedule their next dermal filler appointment until after their child was born. They ended our call by telling me, "I think it will

give me more peace of mind to cancel my appointment and wait until after my pregnancy now that I know there isn't much research. I'll talk to my dermatologist about other skin care options in the meantime."

Do you have a question about a cosmetic procedure during pregnancy or breastfeeding?

Speak with a MotherToBaby specialist via phone, text, chat, or email.

Birth Defects vs. Chromosomal Abnormalities: What's the Difference?

- My fear and anxiety over my soon-to-arrive first child is overwhelming on a daily basis…I'm angry some days, sad some days, and panicked other days.
- My anxiety and depression levels has been higher than normal
- I'm scared when I go anywhere or see anyone, even when I'm maintaining social distancing.

- We planned on having an amazing support team and the rug was pulled from under us.
- I realize this is uncharted territory, but I have not felt supported as a first-time mother.[1]

These were the sentiments of pregnant individuals going through the pandemic. It was an unprecedented event and as MotherToBaby Specialists we were challenged with dealing with the anxiety of expectant parents as they tried to get reliable information and deal with their fears, anxiety, and frustrations. Fortunately, as time went on, the infection did not appear to increase the chance of birth defects but now there is a question of the emotional toil it put on pregnant women.

Post-traumatic stress disorder (PTSD) is a condition of persistent mental and emotional stress that occurs after suffering a stressful or extremely traumatic event. Unlike post-traumatic stress that lessens over time, the symptoms of PTSD do not fade. Symptoms of PTSD fall into the following four categories and can vary in severity:

- **Intrusion**: may include intrusive thoughts or distressing memories, flashbacks, nightmares
- **Avoidance**: may include avoiding thinking or talking about the event or their feelings; avoiding things that remind them of the event (people, places, activities).
- **Negative changes in thinking or mood:** may include lack of memory on details about the event; negative thoughts and feelings about themselves or others; feeling numb or detached from others; loss of interest in activities.
- **Changes in physical and emotional reactions (arousal):** may include being irritable and having angry outbursts; self-destructive behavior; having problems concentrating or sleeping.

In general, PTSD occurs more often in women than in men and in the pregnant population more than non-pregnant individuals. According to some studies, 3% to 19% of pregnant women experience PTSD.[2] When it comes to psychiatric disorders during pregnancy, PTSD after childbirth or postpartum PTSD is considered the third most common mental health disorder after depression and nicotine dependence.[3]

If left untreated or poorly treated, PTSD can have long lasting effects not only for the pregnant woman but also in her relationships with other people, especially family, and interfere in bonding with their child and breastfeeding that can have long-lasting impact on the child. Pregnant women with untreated PTSD have a higher chance of experiencing negative birth outcomes including gestational diabetes (diabetes that develops during pregnancy), preeclampsia (severe high blood pressure), low birthweight (weight at birth of < 2500 grams,5.5 pounds), and preterm birth (before 37 weeks pregnancy). Also, quite alarming, PTSD is closely linked to attempting or committing suicide and substance abuse, two leading causes of maternal death in the United States.[3]

We know that the pandemic was a stressful situation for the entire country and especially pregnant women, but what

were the long-term effects, particularly in regard to PTSD. In general, risk factors for postpartum PTSD include, but are not limited to, the fear of childbirth, prenatal health concerns (preeclampsia, birth defects), the lack of emotional/social support, depression and anxiety. During the pandemic the primary concern was the risk of infection for themselves and for their child before birth and after. Also, birth plans had to be changed due to hospital restrictions. They did not have the social support that they expected or planned with their doulas, partners, family or friends. The lack of social support was not only an issue during childbirth but remained after birth due to stay-at-home orders. Furthermore, expectant parents may have had to face other problems amplified by the pandemic like unemployment and the loss of a loved one. The sense of security and community was greatly affected during the pandemic and then expectant parents had to navigate a new world while just becoming parents, as expressed by pregnant women above. All of these factors can create a traumatic experience of childbirth and raise the chance for PTSD.

There have been multiple studies investigating the effects of the COVID-19 pandemic during pregnancy. While studies may have differed in their approach to review this topic, the results generally showed that giving birth during the pandemic had many effects on the pregnant population and that PTSD was quite common. Also, rates of PTSD were higher among Black and Latinx pregnant women than whites and lower socio-economic status (i.e., less educational and income).

Recommendations:

There is a call for PTSD to be screened during pregnancy and after to make sure that no one falls through the cracks. It is suggested that providers who had patients deliver in the early part of the pandemic, follow-up with them to make sure they are coping well. Not everyone who experiences PTSD will need counseling, but pregnant women should know about their options.

"Trauma is perhaps the most avoided, ignored, belittled, denied, misunderstood, and untreated cause of human suffering," said Peter Levine, PhD, trauma specialist. For pregnant individuals, if your symptoms are interfering with your quality of life, please speak with your healthcare professional so that you can get the assistance that you need. ***As MotherToBaby information specialists we can connect you to the resources that can promote your health and well-being. We provide information about medications used to treat PTSD as well as exposure to anxiety, depression, and stress on pregnancy and breastfeeding. We are just one important resource that new and expecting parents can rely on for confidential information. Contact us today or visit our Resource Hub on Mental Health during pregnancy and breastfeeding.***

There are resources available to help you.

Postpartum Support International: https://www.postpartum.net/learn-more/postpartum-post-traumatic-stress-disorder/

National Maternal Mental Health Hotline: **1-833-943-5746 (1-833-9-HELP4MOMS)**

https://mchb.hrsa.gov/national-maternal-mental-health-hotline

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"I can't get rid of it fast enough!" Caroline was 5 months pregnant and at her wits end when she contacted MotherToBaby. "My migraine is so bad that I can barely get out of bed, but I feel like there's nothing I can do about it since I'm pregnant. I don't want to harm the baby!" We often get questions like Caroline's from women planning a pregnancy or already pregnant who would like information on the prevention and treatment of migraine headaches, so I start by asking Caroline what she would have used if she weren't pregnant. Caroline told me that she would have taken ibuprofen and or sumatriptan.

Migraine preventions and treatments fall into three basic categories:

- **Over the counter remedies** such as aspirin or other NSAIDs, or acetaminophen with or without caffeine.
- **Prescription medications** such as opioids, various anticonvulsants, triptans, tricyclic antidepressants and beta blockers.
- **Alternative therapies** such as Botox or other nerve block injections, massage therapy, acupuncture, high doses of magnesium, or essential oils.

Most women have tried more than one therapy that has failed before they find one or a combination of products that will work for them. Migraines can be very debilitating, so the thought of having to go without a prevention or treatment that works can be very anxiety producing. Yes, it is true that some women find that their migraines disappear during pregnancy, but in others, they become more frequent. Having a plan for prevention and treatment, just in case, is necessary. We can help with the development of that plan by providing migraine sufferers with evidence-based information about the safety of various treatments during pregnancy (and also while breastfeeding!). Below is a brief summary of many common migraine medications and treatments, but we encourage you to visit our Fact Sheets or contact our experts for more detailed information.

Over the Counter Remedies

Typically, non-steroidal anti-inflammatory medications like aspirin, naproxen and ibuprofen are not recommended in pregnancy.

Acetaminophen alone does not always provide relief for a migraine, but its use should not be of great concern depending on how much or how often it is needed.

Caffeine can sometimes be added to enhance the relief of a migraine in some individuals. Typically, such doses of caffeine are not expected to create an increased chance for adverse pregnancy outcome. For further guidance on caffeine, see our fact sheet.

Other over the counter remedies that fall into the herbal or supplement categories are also not recommended since they are not well regulated or studied for safety. See our fact sheet on herbal supplements.

Prescription Medications

Many women find that over-the-counter products are not helpful enough and turn to healthcare providers for prescription medication relief. Prevention of the headache in the first place is key for some.

Beta blockers have been around a long time and used daily for migraine prevention in some individuals. Studies do not suggest that their use in pregnancy is high risk. See our Fact Sheets on metoprolol and propranolol for additional information.

The tricyclic antidepressants, such as amitriptyline and nortriptyline, are older drugs that have been successful in some at the prevention of migraine headaches when used daily. They too have not been found to be high risk products when used in pregnancy.

Other medications such as certain anticonvulsants have been used to prevent or reduce the severity or frequency of migraines. However, these medications have more complex concerns when used in pregnancy. The chance for complications in pregnancy must be individually and carefully weighed against the benefits of keeping migraines in check.

The “triptan” products were designed specifically to treat migraine headaches and include sumatriptan, rizatriptan, frovatriptan and naratriptan. As the “triptan” medication that has been around the longest time, sumatriptan has relatively reassuring data on use during pregnancy.

Opioids are used to treat the extreme pain caused by migraines. While they are not typically found to cause a significant increased chance for birth defects, regular use can create problems later in pregnancy or after birth. In some cases, their use may cause rebound headaches and therefore create more need for treatment.

Alternative Therapies

Migraines can be really difficult to prevent or treat, and some women turn to alternative therapies. Botox, bupivacaine, or lidocaine injections have been used as nerve blockers to treat migraines. However, it may not be best to try these out for the first time during a pregnancy.

Some non-pharmaceutical options include massage therapy and acupuncture. Your healthcare provider may be able to refer you to someone who has experience implementing these treatments with pregnant women.

Essential oils are used topically or in a diffuser. Be careful not to ingest any. If you are nursing or have an infant, be sure not to leave oils on your body where they might accidently ingest them.

We have had questions about the use of high doses of magnesium to curb migraines. We cannot recommend this option and suggest that you seek out the advice of your healthcare provider to determine if such treatment would be helpful or wise.

The Takeaway

I gave Caroline a summary of what is known about her usual migraine treatments, and suggested she have a conversation with her healthcare provider to discuss a safer alternative to ibuprofen and whether her provider would suggest any other changes to her treatment plan. The bottom-line is the benefits of some treatments may outweigh the risks of not treating migraines. A healthy mama from toe to head (especially a pain-free head) is best for baby too.