Migraine in Pregnancy

Pregnancy can be a memorable and meaningful time in a person's life. However, pregnancy is a little different for those living with migraine.

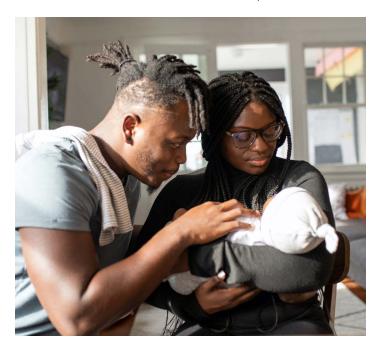
For those who have finally found a migraine treatment plan that works, pregnancy can create a new set of worries. Are there pregnancy-safe medication options? How do I talk to my doctor about managing migraine during pregnancy?

This guide is designed to help you figure out how to manage migraine during pregnancy. From preventive strategies and medications to pregnancy-safe treatment options, this outline covers all things pregnancy and migraine.



Plan Ahead: Make a Doctor's Visit Before You Start Trying

One way to manage migraine during pregnancy is to reduce stress by staying informed. Schedule an appointment with your doctor six months before you start trying to get pregnant. This can help your provider develop a personalized migraine treatment plan you can use throughout your pregnancy. It's important to ask the right questions to receive the most useful treatment plan.



• Questions To Ask Your Provider:

- Is my current medication safe for pregnancy?
 - Be sure to address all medications you take, including supplements, vitamins and over-the-counter medications.
 - If you are worried that your migraine symptoms may get worse if you stop using your medication, your provider might recommend a consultation with a maternal-fetal medicine specialist—an OB-GYN who can share the possible risks of medications on fetal development.
- What lifestyle changes can I make to reduce the risk of a migraine attack during pregnancy?
 - Find a migraine treatment strategy that includes both non-medication and medication treatments (if necessary).
- Oo I need to stop taking medication before trying to get pregnant?
 - If you need to stop using your medication, ask your provider for an alternative option.
- When should I stop taking my medication if I'm planning on getting pregnant?

How Does Pregnancy Affect Migraine?

While it's different for everyone, the good news is that up to 80% of women have fewer or less intense migraine attacks by the time they reach the second trimester (weeks 13-26) of pregnancy. Unfortunately, this isn't always the case, as some people experience worsening or new migraine symptoms while pregnant. Each pregnancy is different from person to person. Migraine frequency and severity may even vary within the same person from one pregnancy to the next.

Migraine Management During Pregnancy

It's normal to feel worried or confused about which medications are safe to use during pregnancy. The good news is that new information is always being released on the safety of medications during pregnancy, so work with your provider to get the latest information.

The goal of migraine management is to have a plan in place to help you manage your disease—from medication to lifestyle changes and preventive strategies to reduce the frequency and severity of future attacks.

Your provider may recommend that you stop taking medications during pregnancy to avoid potential side effects for you and your baby. In these cases, non-medical preventive migraine strategies may become essential during pregnancy.



Consider some of these lifestyle changes:

Relaxation therapy, maintaining regular sleep

and exercise routines

- It is best to start these strategies before pregnancy if possible.
- If you were not physically active before pregnancy, be sure to check with your provider about starting a new exercise routine.
- A healthy and balanced diet, as well as eating regularly and not skipping meals
- Practicing prenatal yoga or prenatal massage
- Gradually reducing your daily caffeine intake
 - If you lower your daily intake, you may find that a cup of coffee or tea is a helpful intervention for a mild or moderate migraine attack.

The American Migraine Foundation has created a chart of treatment options and medications that are deemed safe for pregnancy by the FDA. Use the chart, at the end of this guide, to discuss your options with your provider.

Headache Red Flags in Pregnancy

While it's not helpful to be anxious about endless possibilities, you should be aware of red flags relating to headache and migraine symptoms throughout pregnancy.

The key is to call your doctor or seek medical assistance quickly if a serious concern arises. Don't let this list stress you out, but do keep these in mind. And remember, help is always just a phone call away.

If you are experiencing any of the following, please consult your doctor right away:

- New signs or symptoms with your headache, such as visual changes, weakness, numbness, tingling or changes to speech or swallowing
- A change in headache features (location, onset, pain quality), frequency or severity
- · Elevated blood pressure during pregnancy
- An unusually severe or sudden onset headache (reaches maximum pain within seconds)

Appendix: Migraine Treatments During Pregnancy

Migraine Rescue Strategies During Pregnancy

Below is a list of pregnancy-safe acute treatment options—treatments designed to stop a migraine attack in its tracks—as well as a list of acute medications to avoid. Make sure to bring this list to your doctor to discuss your options during your next appointment.

Pregnancy-Safe Acute Acute Migraine Medications Migraine Treatment Options to Avoid in Pregnancy Nonsteroidal anti-inflammatory drugs Nonsteroidal anti-inflammatory drugs (NSAIDs) like Motrin - these are only (NSAIDs) - avoid before week 12 and safe between weeks 12 through 20 of after week 20 of pregnancy pregnancy Indomethacin Diphenhydramine (Benadryl) Acetaminophen (Tylenol) Peripheral nerve blocks with lidocaine **Ergots** Metoclopramide Lasmiditan Prochlorperazine Gepants (ubrogepant, rimegepant) Promethazine Prednisone Butalbital*

(Source: Loder E, Weizenbaum E, Frishberg B, Silberstein S; American Headache Society Choosing Wisely Task Force. Choosing wisely in headache medicine: the American Headache Society's list of five things physicians and patients should question. Headache. 2013 Nov-Dec;53(10):1651-9. doi: 10.1111/head.12233. Epub 2013 Oct 29. PMID: 24266337.)

Table is adapted from: Burch R. Epidemiology and Treatment of Menstrual Migraine and Migraine During Pregnancy and Lactation: A Narrative Review. Headache. 2020 Jan;60(1):200-216. doi: 10.1111/head.13665. Epub 2019 Oct 3. PMID: 31579938.

Saldanha IJ, Cao W, Bhuma MR, Konnyu KJ, Adam GP, Mehta S, Zullo AR, Chen KK, Roth JL, Balk EM. Management of primary headaches during pregnancy, postpartum, and breastfeeding: A systematic review. Headache. 2021 Jan;61(1):11-43. doi: 10.1111/head.14041. Epub 2021 Jan 12. PMID: 33433020.

^{*}Butalbital is not strongly associated with increased risk of developmental abnormalities. However, it is not recommended for frequent headache treatment due to the risk of medication overuse headache.

Devices for Migraine Treatment During Pregnancy

Neuromodulation devices are tools to consider during pregnancy because they're not medications and are not invasive. There are a number of them with FDA clearance for use in migraine.

Although there are no specific studies of these devices in pregnant women, no risks have been observed in studies that included pregnant women or animals.

Below is a list of devices you may consider discussing with your provider. Your doctor can explain how they work and support you if you choose to add them to your migraine treatment plan.

Neuromodulation Device	Use in Migraine	Pregnancy Risk
CEFALY® (e-TNS) External Trigeminal Nerve Stimulation	FDA-cleared for the acute and preventive treatment of migraine	Unknown
SpringTMS (sTMS) Single Pulse Transcranial Magnetic Stimulation	FDA-cleared for the acute and preventive treatment of migraine	A post-marketing European pilot study included three pregnant women in the first and second trimesters with demonstrated success and no adverse fetal outcome
gammaCore Sapphire™ (nVNS) Non-Invasive Vagus Nerve Stimulation	FDA-cleared for the acute and preventive treatment of migraine	No human studies done in pregnancy. One animal study on pregnant rats showed that chronic vagal nerve stimulation does not impede the progress or outcome of pregnancy, cause preterm birth or affect fetal cardiovascular and respiratory development.
Nerivio (REN) Remote Electrical Neuromodulation	FDA-cleared for the acute treatment of episodic migraine	Unknown
Relivion® (eCOT-NS) External Combined Occipital and Trigeminal Nerve Stimulation	FDA-cleared for the acute treatment of migraine	Unknown

Migraine Preventive Strategies During Pregnancy

If your migraine attacks are becoming so frequent or severe that you have trouble working or participating in your usual activities, it may be time to consider a preventive strategy. Preventive lifestyle and behavioral changes, like those mentioned above, are great options to manage migraine during pregnancy. But if those changes aren't working, there are also preventive medications and treatment options to consider.

The tables below contain preventive migraine treatment options that are safe in pregnancy as well as preventive options to avoid during this time.

Pregnancy-Safe Preventive Migraine Treatment Options	
Cyproheptadine	
Verapamil	
Memantine	
Coenzyme Q10	
Riboflavin (vitamin B2)	

Preventive Migraine Medications to Avoid in Pregnancy		
Topiramate	Methergine	
CGRP monoclonal antibodies (erenumab, galcanezumab, fremanezumab and eptinezumab)	Feverfew	
Atogepant	Butterbur	
Candesartan	Gabapentin	
Lisinopril	Pregabalin	
Venlafaxine	Duloxetine	
Valproate/valproic acid (Depakote®)		

(Source: Silberstein SD, Holland S, Freitag F, Dodick DW, Argoff C, Ashman E. Evidence-based guideline update: pharmacologic treatment for episodic migraine prevention in adults: Report of the Quality Standards Subcommittee of the American Academy of Neurology and the American Headache Society [published correction appears in Neurology. 2013;80(9):871]. Neurology. 2012;78(17):1337-1345.)



The mission of the American Migraine Foundation is to mobilize a community for patient support and advocacy, as well as drive and support impactful research that translates into advances for patients with migraine and other disabling diseases that cause severe head pain. Visit americanmigrainefoundation.org for more

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