

## Headaches and migraines during pregnancy



### Why headaches can change in pregnancy

Pregnancy is a period of major endocrine, vascular, metabolic, and sleep-related change. Estrogen and progesterone rise substantially, blood volume expands, and many people experience nausea, vomiting, fatigue, changes in caffeine intake, altered posture, sinus congestion, and emotional stress. Any of these can influence head pain.

For migraine specifically, estrogen stability appears to matter. Outside pregnancy, falling estrogen levels around menstruation can trigger attacks in susceptible people. During pregnancy, estrogen rises and becomes more stable, which is one reason migraine often improves, especially after the first trimester. This improvement is not universal. Migraine with aura may be less predictably affected, and some people have attacks throughout pregnancy or notice postpartum recurrence when hormones shift again.

Primary headaches, such as migraine or tension-type headache, are not caused by another disease process. Secondary headaches are caused by another condition, and pregnancy changes the risk profile for some serious causes, including hypertensive disorders. This is why a familiar headache pattern is usually approached differently from a first-ever severe headache, a sudden

"thunderclap" headache, or a headache with visual, neurologic, or blood pressure concerns.

## **Common pregnancy-related headache triggers**

Many triggers are not unique to pregnancy, but pregnancy can make them harder to avoid. A practical trigger review can help you and your healthcare professional identify patterns without implying blame.

**Dehydration:** Fluid needs may increase, and nausea or vomiting can make hydration difficult.

**Skipped meals or low blood glucose:** Food aversions, reflux, or a busy schedule can lead to long gaps without eating.

**Sleep disruption:** Insomnia, frequent urination, discomfort, or anxiety may lower the migraine threshold.

**Caffeine changes:** Abruptly reducing caffeine can cause withdrawal headaches; excessive caffeine may also be undesirable in pregnancy, so discuss a reasonable limit with your clinician.

**Stress and muscle tension:** Jaw clenching, neck strain, and prolonged screen time can contribute to tension-type headache and may amplify migraine.

**Nausea and vomiting:** Persistent vomiting can worsen dehydration and electrolyte imbalance, increasing headache risk. Related reading may include nausea and vomiting during pregnancy and why they happen or, when symptoms are severe, severe nausea and vomiting in pregnancy.

## **Migraine symptoms versus other headaches**

Migraine is a neurologic disorder, not simply a "bad headache." A migraine attack may include moderate to severe throbbing or pulsating pain, often one-sided but not always, worsened by movement, and associated with nausea, vomiting, light sensitivity, sound sensitivity, smell sensitivity, dizziness, or cognitive fog. Some people experience aura: temporary neurologic symptoms such as shimmering lights, blind spots, tingling, speech disturbance, or other sensory changes that typically develop gradually and resolve.

Tension-type headache is often described as bilateral pressure or tightness, like a band around the head, and is usually milder than migraine. Sinus pressure, jaw pain, neck strain, dehydration headache, and caffeine-withdrawal

headache may overlap in presentation.

Because pregnancy can introduce new risks, the key question is not only "Does this sound like migraine?" but also "Is this typical for me?" A headache that is new, abrupt, unusually severe, persistent, or accompanied by neurologic symptoms, fever, high blood pressure, swelling, chest pain, shortness of breath, or visual disturbance should be assessed promptly.

### **Non-medication strategies that are often useful**

Non-pharmacologic approaches are often the foundation of headache care in pregnancy. They are not a substitute for medical evaluation when warning signs are present, but they can reduce attack frequency and make mild or familiar headaches easier to manage.

**Hydrate steadily:** Small, frequent sips may be easier than large amounts at once, especially if nausea is present.

**Eat regularly:** Pairing carbohydrates with protein or healthy fats may help stabilize blood glucose.

**Prioritize sleep regularity:** Consistent sleep and wake times can be protective for migraine, even when total sleep is imperfect.

**Use a headache diary:** Track timing, duration, pain quality, associated symptoms, foods, sleep, hydration, stress, caffeine, medicines, and blood pressure readings if advised.

**Reduce sensory load:** Resting in a dark, quiet room, using cold packs, and limiting strong odors may help during attacks.

**Address neck and jaw tension:** Gentle stretching, posture adjustments, prenatal physical therapy, massage from a trained provider, or relaxation exercises may be useful.

**Consider supervised complementary therapies:** Some people discuss acupuncture, biofeedback, or relaxation training with their care team.

Fatigue can strongly lower pain tolerance and migraine threshold. If exhaustion is prominent, it may be worth discussing fatigue and extreme tiredness in pregnancy with your clinician, especially if it is severe, sudden, or associated with dizziness, palpitations, or poor intake.

### **Medication and treatment considerations**

Medication decisions in pregnancy require individualized risk-benefit discussion. The safest approach is to involve your obstetric clinician, midwife, neurologist, or pharmacist before taking any new prescription medicine, over-the-counter drug, supplement, essential oil, or herbal product. "Natural" does not automatically mean safe in pregnancy.

For occasional headache, acetaminophen is commonly discussed as an option during pregnancy, but dose, frequency, liver health, combination products, and other medical factors matter. Nonsteroidal anti-inflammatory drugs, triptans, anti-nausea medicines, magnesium, beta-blockers, nerve blocks, and other acute or preventive migraine therapies may be considered in selected situations, but appropriateness depends on trimester, diagnosis, severity, comorbidities, and prior treatment response. Do not stop or start migraine preventives abruptly without professional guidance.

If migraine attacks are frequent, disabling, prolonged, or associated with repeated vomiting, the goal is not simply to "tough it out." Undertreated pain, dehydration, poor nutrition, sleep deprivation, and repeated emergency visits can also carry burdens. A clinician can help build a pregnancy-specific plan that includes when to use non-drug measures, when medication may be appropriate, when to check blood pressure, and when to seek urgent care.

### **When headache may signal a complication**

Most headaches in pregnancy are not dangerous, but pregnancy-related hypertensive disorders, including preeclampsia, can present with headache. Preeclampsia is classically a condition of elevated blood pressure after 20 weeks of pregnancy, often with signs of organ involvement. Headache from preeclampsia may be persistent, severe, or different from usual, and it may occur with visual symptoms, upper abdominal pain, nausea, swelling, shortness of breath, or abnormal blood pressure.

Other serious causes of headache are uncommon but important, including stroke, cerebral venous thrombosis, meningitis, pituitary apoplexy, reversible cerebral vasoconstriction syndrome, and intracranial bleeding. These possibilities are why sudden, severe, neurologically complicated, or atypical headaches require urgent medical assessment rather than home management.

If you have a blood pressure monitor and have been advised to use it, follow your care team's thresholds for calling or going in. If you do not have a monitor but feel that something is wrong, seek care. Your concern is enough reason to be evaluated.

### **Planning ahead for birth and postpartum**

Headache planning should extend beyond pregnancy. Migraine often improves during the second and third trimesters for many people, but attacks may return postpartum as estrogen levels drop, sleep becomes fragmented, meals are missed, and stress increases. Breastfeeding or chestfeeding also affects medication choices, so it is helpful to ask about postpartum-compatible acute treatments and preventives before birth if migraine has been a significant issue.

Consider preparing a written plan that covers typical symptoms, preferred non-drug measures, medications approved by your clinician, maximum frequency of use, red flags, and who to contact after hours. If you have a history of chronic migraine, aura, hypertension, clotting disorders, or complex neurologic symptoms, a coordinated plan between obstetrics and neurology can be especially valuable.