

# Migraine and Pregnancy

## Safe treatment options for pregnant women with migraine

Pregnancy can have a significant impact on migraine symptoms, as hormonal changes are a common trigger for women with migraine. In general, migraine often improves for pregnant women—especially in the third trimester—because of rising estrogen levels. However, that isn't the case for every pregnant woman with migraine, and primary care practitioners need to implement the appropriate treatment for the individual patient.

### Acute Treatment

The overall strategy should be focused on nonpharmacologic approaches:

- Neuromodulation devices
- Physical therapy
- Cognitive-behavioral therapy
- Stress-reduction measures
- Exercise and yoga
- Adequate hydration
- Sleep



### Pharmacologic approaches:

Type	Treatment
Preferred	Acetaminophen/caffeine
	Metoclopramide (with/without diphenhydramine)
Second-line	Sumatriptan
	Rizatriptan
	Naratriptan
Consider	Nerve blocks
	Trigger point injections
	Sphenopalatine ganglion blocks
	IV magnesium

Recent research suggests avoiding butalbital-containing compounds, which overturns long standing recommendations for acute treatment in pregnant patients.

## Preventative Treatment

For consideration in most patients:

Agent	Notes
Propranolol, 120-160 mg	Decreased placental perfusion, bradycardia, hypoglycemia
Riboflavin, 200 mg bid	Watch for signs of overuse (diarrhea, frequent urination)
Magnesium, 400-600 mg	FDA warning for IV high dose (>5-7 days)
Nerve blocks, ropivacaine or lidocaine	Generally safe and well-tolerated

\*Calcium channel blockers (eg, amlodipine) are generally considered the safest preventive option during pregnancy; if necessary, they may be used as an alternative to the preventive treatments listed in this chart.

Implement with caution:

Agent	Notes
Amitriptyline	Cardiac problems, respiratory distress, muscle spasms
Venlafaxine	Defects of the heart, brain and spine, cleft lip and cleft palate
Nadolol, atenolol	Watch for fetal growth restriction with serial ultrasound
Memantine	No reliable data in humans
Coenzyme Q10 300 mg	Conflicting evidence
Melatonin 3 mg	Conflicting evidence

## If Headache is New or Worse...

The overall strategy should be focused on nonpharmacologic approaches:

- Tumor
- Eclampsia
- Preeclampsia (after  $\geq 20$  weeks)
- Idiopathic intracranial hypertension
- Subarachnoid hemorrhage
- Cerebral venous thrombosis
- Reversible cerebral vasoconstriction syndrome
- Pituitary apoplexy

In the search for secondary causes, CT scan and gadolinium contrast should be avoided.

## Postpartum Headache

- The rapid decrease of estrogen levels at birth can lead to migraine attacks and can be treated with traditional acute therapies.
- Low-pressure headache after epidural injection is usually postural and improves with supine posture. It can also be treated with blood patches and caffeine.