

Table 9. First-Line Preventive Medications for Migraine

Drug Name (Brand)	FDA Approved	Formulation	Usual Dosage	Comments
Onobotulinum toxin A (Botox)	Yes	Injection	Dose: Varies (FDA official dose is 155 units, via 31 injections, every 3 mo)	One set of injections can decrease headaches for 1-3 mo. Botox is most likely safer than the other medications used for headache. There also is a cumulative benefit, in which the headaches continue to improve over 1 y of Botox therapy.
Anticonvulsants				
Topiramate (Topamax) Topiramate ER (Trokendi)	Yes	Oral	Total dose varies from 25 or 50 mg/d up to 400 mg/d.	Sedation and cognitive side effects, such as confusion or memory problems, may limit its use; GI upset may occur. Topiramate increases the risk for kidney stones. Bicarbonate levels should be monitored because topiramate may cause dose-related metabolic acidosis.
Valproic or Divalproex sodium (Depakote)	Yes	Oral	Usual dose: 500-1,000 mg/d, in divided doses	Liver function levels need to be monitored in the beginning of treatment. Depakote needs 4-6 wks to become effective. Side effects include lethargy, GI upset, depression, memory difficulties, weight gain, and alopecia. Depakote should not be used during pregnancy. Available in 125, 250-ER, and 500-ER mg tablets.
β-blockers				
Propranolol (Inderal, others)	Yes	Oral	60-120 mg/d	Side effects include dizziness, insomnia, fatigue, GI upset, respiratory distress, weight gain.
Metoprolol (Toprol XL)	No	Oral	25-100 mg/d	Fewer respiratory effects than propranolol.
Atenolol (Tenormin)	No	Oral	25-50 mg/d	Fewer respiratory effects than propranolol.
Nebivolol (Bystolic)	No	Oral	2.5-10 mg/d	Better tolerated than the other β -blockers with the fewest respiratory effects.
Tricyclic Antidepressants				
Amitriptyline (Elavil, others) Nortriptyline (Pamelor)	No	Oral	Starting dose: 10 mg at bedtime; titrate up to 25-50 mg at night. Maximum dose: 150 mg/d	Effective, inexpensive, and also useful for daily headaches and insomnia. Sedation, weight gain, dry mouth, and constipation are common. Nortriptyline, a metabolite of amitriptyline, is somewhat better tolerated (milder).
Doxepin (Sinequan)	No	Oral	Starting dose: 10 mg at bedtime; titrate up to 25-50 mg/d. Maximum dose: 150 mg/d	Similar to amitriptyline, with fewer side effects.
Protriptyline	No	Oral	5-20 mg/d	Protriptyline is one of the only older antidepressants that does not cause weight gain. However, its anticholinergic side effects are more pronounced. More effective for tension than migraine.