

TOPIRAMATE – TITRATE AND HYDRATE

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- ▶ START AT A LOW DOSE AND TITRATE TO EFFECT
- ▶ WARN ABOUT OCULAR PAIN AND VISUAL IMPAIRMENT
- ▶ ENCOURAGE ADEQUATE FLUID INTAKE ESPECIALLY DURING EXERCISE OR WARM TEMPERATURES
- ▶ BE AWARE OF EMERGING OR WORSENING DEPRESSION OR SUICIDALITY
- ▶ PROVIDE EDUCATION ABOUT CONTRACEPTION

Topiramate is an antiepileptic medicine that can be given alone or as adjunct therapy. It is used for generalised tonic-clonic seizures and partial onset seizures. Topiramate is also indicated for migraine prophylaxis.

START AT A LOW DOSE AND TITRATE TO EFFECT

Initiate topiramate at 25mg at night and slowly titrate upwards by 25mg per week as tolerated until an effective dose is reached. This can take 4-6 weeks, but longer intervals between dose adjustments may be needed if side effects, such as drowsiness, are troublesome.

The recommended daily dose for migraine prophylaxis is 100mg per day in divided doses. Some people will experience relief at just 50mg per day and others may require up to 200mg per day. If topiramate is not helpful after 3-4 months at the maximum tolerated dose, slowly titrate off and try an alternative option.

The optimal dose for epilepsy depends on whether topiramate is used as a monotherapy or add-on therapy. Refer to the datasheet for more detailed dosing information and for recommended doses in children.

People with hepatic impairment may require a lower dose. If there is renal impairment, use half the regular starting and maintenance doses.

Note: If topiramate is discontinued, withdraw gradually because there is risk of seizures following rapid withdrawal *regardless of whether there is a history of seizures or not.*

WARN ABOUT OCULAR PAIN OR VISUAL IMPAIRMENT

Topiramate is associated with a syndrome that presents as acute myopia and can progress to secondary angle closure glaucoma; this applies to children as well as adults, and is not dose-related. If ocular pain or visual impairment occurs, discontinue topiramate and refer to an ophthalmologist for advice. Elevated intraocular pressure can lead to permanent loss of vision if left untreated.

ENCOURAGE ADEQUATE FLUID INTAKE ESPECIALLY DURING EXERCISE OR WARM TEMPERATURES

Topiramate can cause an increase in body temperature, which can be problematic during exercise or in hot weather. Adequate hydration should be actively encouraged, especially with children and people taking anticholinergic medicines that also predispose to dehydration and decreased sweating.

Note: Topiramate is associated with risk of renal stone formation (nephrolithiasis) which is increased if people are dehydrated or in hot climates. Other medicines such as long-term corticosteroids can further increase the risk if taken concurrently.

BE AWARE OF EMERGING OR WORSENING DEPRESSION OR SUICIDALITY

Although the overall risk is small, everyone taking antiepileptic medicines should be monitored for behavioural changes that could indicate emerging suicidal thoughts or depression. In clinical trials, suicide-related events occurred in 0.5% of people taking topiramate, compared with 0.2% with placebo. These thoughts and behaviours can occur from one week after starting topiramate, and are generally dose-related.

PROVIDE EDUCATION ABOUT CONTRACEPTION

Women using combined oral hormonal contraceptives and high-dose topiramate (greater than 200mg daily), may be at an increased risk contraceptive failure because topiramate induces ethinylestradiol metabolism. If prescribing an oral contraceptive with topiramate, consider a product with at least 35-50micrograms of ethinylestradiol.

Topiramate is classified as pregnancy category D, so is considered to be teratogenic. There are no clinical studies of topiramate during pregnancy but data from pregnancy registries indicate that there is an increased risk of congenital malformation.

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All women of child bearing potential receiving antiepileptic medicines should receive pregnancy counselling, and folic acid 5mg per day. Women with epilepsy who are planning a pregnancy should be referred for specialist advice; the combined input of a neurologist and an obstetrician is usually required.

Migraine

If migraine attacks are frequent, investigate potential triggers including stress, sleep deprivation, alcohol use, or medicines such as nitrates or combined oral contraceptives.

Consider preventive treatment if there are:

- at least two attacks a month
- an increased frequency of headaches
- significant disability despite receiving treatment for acute attacks or if acute treatment is not tolerated

Options for prophylaxis include beta-blockers (eg propranolol, atenolol, metoprolol, nadolol, or timolol), or topiramate. Unapproved options include sodium valproate, gabapentin or tricyclic antidepressants such as amitriptyline. The choice depends on individual factors such as comorbidities, tolerability and preference.

Note: The efficacy of topiramate for the acute treatment of migraine has not been evaluated. Access to acute treatments will still be needed, even if prophylaxis is prescribed.

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KEY REFERENCES

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[CLICK HERE FOR FURTHER INFORMATION ON TOPIRAMATE AND A FULL REFERENCE LIST](#)

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