**Topiramate Protocol**

Three large trials have shown that topiramate can reduce migraine frequency by 50% in approximately half the patients using it. This is roughly similar to Beta-Blockers. Topiramate has an early onset of action within the first 4 weeks and maintains the reduction in migraine frequency over 6 months.

# Dosage

The target dose is 100 mg a day in 2 divided doses. Some patients may experience benefit at a total daily dose of 50mg/day. Many side effects are dose dependant so it is best to initiate it at low dose titrating up slowly. Topiramate should be started with one 25 mg tablet at night increasing by 25 mg/day at one – two week intervals i.e.

|  |  |  |
| --- | --- | --- |
|  | AM dose | PM dose |
| Week 1-2 |  | 25 mg |
| Week 3-4 | 25 mg | 25 mg |
| Week 5-6 | 25 mg | 50 mg |
| Week 7-8 | 50 mg | 50 mg |

Topiramate is available as 25 and 50 mg tablets or as sprinkle capsules. It can be taken with or without food.

**Contra Indications**

Known hypersensitivity to topiramate or any of the tablet/capsule excipients

Not to be used in acute porphyrias.

## Cautions

* Abrupt withdrawal of topiramate should be avoided, the dose should be reduced gradually over at least 2 weeks to minimise the possibility of rebound migraine headaches.
* Patients should be advised to drink plenty of water to avoid dehydration and to reduce the likelihood of developing kidney stones
* Topiramate is teratogenic and therefore should not be used during pregnancy. Women of childbearing potential should be advised to use adequate contraception whilst taking topiramate. Topiramate should not be used during breast feeding.
* Topiramate may need to be titrated more slowly in patients with renal impairment and should be used with caution in patients with hepatic impairment.

# Side Effects

* Common > 10%
  + Paraesthesia in about 50%
  + Anorexia, nausea
  + Weight loss
  + Fatigue
  + URTI
  + Diarrhoea
* Less common < 10%
  + Cognitive effects such as memory, language and somnolence
  + Depression and mood alteration
* Rare < 1 %
  + Acute myopia secondary to angle closure glaucoma
  + Choroidal effusions resulting in anterior displacement of the lens and iris

**Monitoring**

* **Response to therapy**
  + Topiramate should be administered for a minimum of 12 weeks
  + If effective continue for 6 months and then withdraw to establish continued need. (migraine prophylaxis should rarely be used uninterrupted for more than 12 months)
  + If not effective at adequate dosage or intolerable side-effects, treatment should be withdrawn and alternative therapy considered. Cognitive effects rarely settle so treatment should be withdrawn early if there are significant problems.
* **Treatment Safety**
  + Patients with new onset visual symptoms or signs should have their intra ocular pressure measured urgently. If it is raised they should be referred to the ophthalmology clinic immediately and the topiramate stopped as rapidly as feasible
  + Patients on long term topiramate should be weighed every 8 weeks and discontinuation of treatment should be considered if weight loss is greater than 10%.
  + Patients should be monitored for signs of depression and advised to seek medical help immediately if they have suicidal thoughts.