## Timolol eye drops for the management of migraine attacks.

# Guidance for patients.

## Background

Beta Blockers taken by mouth are used commonly for the prevention of migraine although their mechanism of action is not known. Timolol is a non-selective Beta Blocker taken by mouth licenced for the prevention of migraine with a maximum daily dose of 20 mgs. Timolol eye drops 0.5% contain a much lower concentration and are widely used for the management of glaucoma (raised pressure in the eyeball).

Studies suggest that Timolol eye drops can be beneficial in the management of migraine attacks although like the oral preparation for migraine prevention, how they work is not known. They are absorbed rapidly into the blood stream through the lining of the eye and nose passing into the nose through a duct in the corner of the eye (the lacrimal duct).

### How is Timolol used?

Apply at the earliest onset of an attack. One drop of 0.5% solution is placed in each eye with the head tilted back and followed by blinking to facilitate the passage of drops into the lacrimal duct. If there is no action after 10 minutes this can be repeated. There is no reason why other acute medication can't be used if it is beneficial to do so.

Do not use Timolol drops if you are already taking a Beta Blocker. If you are using Beta Blockers for migraine prevention these should be completely stopped. Do not stop your Beta Blocker if taken for any other reason without discussing it with your doctor.

#### What are the side-effects of Timolol?

As Timolol drops get absorbed into the blood stream, side-effects can occur and are similar to oral Beta Blocker side-effects. The most commonly reported are airways spasm followed by a slowing of the heart rate and a lowering of blood pressure. Your doctor will check if there are reasons why you should not take these drugs.

Timolol drops should be stopped at least five days before an eye pressure check for glaucoma as they will interfere with this measurement.