Headache and eye problems

There is a variety of eye problems that can cause headache. In some cases, the headache is caused by the person squinting and overworking the eye muscles in an attempt to better focus their vision. In other cases, problems of internal pressure and swelling within the structures of the eye can "refer" pain into other areas of the head.

Difficulties with vision, such as blurring caused by long-sightedness, can be corrected with prescription glasses or contact lenses. Other disorders, such as glaucoma, need to be medically investigated and treated promptly. Once the cause of eyestrain is corrected, the associated headaches should ease.

The structure of the eye

The eye is our organ of vision. An image passes through its many layers and is focused on the back of the eye, called the retina. The retina contains light sensitive cells, called rods and cones. Information on shape, colour and pattern is picked up by the retina and carried to the brain via the optic nerve.

The eye focuses images with two structures, the lens and the cornea. The lens has a fine focus function, while the cornea has a fixed focus function. The cornea is plumped up by a small chamber containing fluid called aqueous humour, while the main body of the eyeball is filled and kept firm by a thick, jelly-like fluid called vitreous humour.

Eye strain can cause headache

The cornea and the lens work together to focus images on the retina at the back of the eye. Sometimes, this delicate mechanism fails and the small muscles of the eye are forced to work harder, causing eye strain. The result is tired, aching eyes, blurred vision and headache. Most eye conditions can be corrected with prescription glasses or contact lenses.

The main problems that cause eyestrain and associated headache include:

- astigmatism – the cornea is not a regular shape, which means that objects look blurry from certain angles. A person with astigmatism tends to squint in order to better focus their vision, which can contribute to headache
- hyperopia – or long-sightedness. Instead of focusing the image squarely on the retina at the back of the eye, the image is focused to a point behind the eye
- presbyopia – the lens becomes hard and inflexible with age. Symptoms include difficulties in focusing closely, sore eyes, sluggish changes in focus when looking from one distance to another, and headaches.

Glaucoma and headaches

The eye disease glaucoma can cause severe headaches in some cases. Glaucoma occurs when the drainage area at the back of the eye is blocked, and fluid (aqueous humour) builds up, causing increased pressure (intraocular pressure). The result is damage to the optic nerve. It is not possible to prevent glaucoma from developing, but early detection may help to slow its progression.

The two main types of glaucoma are:

- open angle glaucoma – the slow build-up of intraocular pressure over time. This type usually presents no symptoms
• **angle closure glaucoma** – a sharp increase in intraocular pressure results in severe pain, blurred vision, watering of the eyes, nausea and vomiting. This type of glaucoma attack needs prompt medical intervention.

**Papilloedema can cause headaches**

The optic nerve transmits information from the eye to the brain. Brain tumours, haemorrhages or swelling are just some of the disorders that can cause the optic nerve to swell with excess fluid. This disorder is called papilloedema.

Symptoms can include headaches, blurring and double vision, although it is possible to have no symptoms at all. In chronic cases, there may be nausea, vomiting and permanent loss of vision. If a headache is present, it may feel worse with coughing or sneezing, but eases a little when lying down.

**Seek professional advice for headache**

If you think your headaches may be due to eyestrain, it is important to have your vision checked by a qualified eye specialist. Some people who already wear prescription glasses may not be aware that their eyes may have changed a little over time. It is important to have your eyes regularly tested and your glasses or contact lenses updated.

**Where to get help**

- Your doctor
- Optometrist

**Things to remember**

- Eyestrain can cause or contribute to recurring headaches.
- Common eye problems that can bring on headaches include long-sightedness, astigmatism and hardening of the lens inside the eye.
- Once the cause of the eyestrain is treated and corrected, the associated headaches should ease.

**This page has been produced in consultation with, and approved by:**

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