Ophthalmology in General Practice.

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With relation to eye affections, patients usually consult their family doctor for two chief complaints: 1) pain in the eye, 2) something wrong with vision.

A foreign body in the eye is a common cause of pain. The patient may remember something getting into his eye, or the eye has suddenly started to ache, and the patient is not aware of the presence of a foreign body in his eye. If the eye is examined in good illumination, one might be able to see the foreign body on the cornea. It is usually a piece of grit or steel, and can be removed by instillation of a drop of 4% solution of Cocaine Hydrochloride or 1% Pantocaine, and by employing a foreign body needle to dislodge it. If nothing is seen on the cornea, the patient should not be discharged before everting the upper lid and examining well the upper sulcus subtarsalis which is a favourite site for foreign bodies. A foreign body can be easily removed from this site by the tip of the little finger. The relief of pain is almost instantaneous. If no foreign body is found, a drop of Fluorescein 2% should be instilled into the eye. This will stain the cornea where the epithelium has been injured and will reveal the cause of the pain, usually a corneal abrasion. A drop of penicillin solution or Sulphacetamide and a bandage applied to the eye is all that is necessary.

Stayes (hordeolum) and inflamed meibomian cysts (chalazion) are common painful complaints which the doctor is asked to treat. These are usually inflammatory conditions due to staphylococcal infection of the sweat and sebaceous glands of the lid, leading to the formation of a small abscess. The general condition of the patient is not usually at its best, measures should be taken to improve it. Fomentations, calcium sulphide gr. 1/8, preparations of tin, are usually prescribed. The refraction should be corrected. If the inflammatory condition does not get better, an incision will be necessary.

Attacks of acute glaucoma or acute iritis are amongst the common causes of severe pain in the eye. It is very important to be able to distinguish these two conditions, as they require opposite lines of treatment. In acute glaucoma there is a sudden rise of intraocular tension. Pain is very severe in and around the eye, and vomiting is rather frequent. Signs outside the eye are often so marked, that one is sometimes led to diagnose an abdominal trouble. Vision comes down quickly. Examination of the eye reveals a congested globe, a hazy cornea and a wide dilated pupil. Prompt reduction of tension is necessary. This is obtained by frequent instillations of a strong miotic, eserine sulphate 1% solution, hot bathings, and a purgative. Hospitalization is usually necessary. A glaucomatous eye is often a "sick eye in a sick body" and the general condition of the patient should be thoroughly investigated.

In inflammation of the iris, there is pain in and around the eye. Vision is impaired. There is circumcorneal injection of the blood vessels. The cornea is bright and the pupil is contracted. It is very important to keep the pupil fully dilated to give rest to an inflamed tissue and to prevent adhesions of the iris to the lens capsule, which might lead to various

complications. To obtain this, atropine drops should be instilled. A systematic and thorough search for septic foci should be carried out. Sulpha drugs are often of great help.

Disturbance of vision often brings the patient to his doctor. Loss of vision in one eye may be sudden or gradual. Retinal detachment, thrombosis of the central retinal vein or artery, disseminated sclerosis (retrobulbar neuritis) are amongst the most important causes of sudden loss of vision.

In retinal detachment the patient is much alarmed by noticing a sort of curtain being suddenly drawn in front of his eye. Vision is much reduced. Diagnosis is usually made by the ophthalmoscope. A hole is torn in the retina; vitreous fluid passes behind the retina and slowly pushes it away from the choroid. The only treatment for this condition is replacement of the retina by operation.

Embolism of the central retinal artery gives rise to sudden and complete loss of vision. A non-infected embolus plugs the main trunk of the artery. Pain is completely absent. The patient is often suffering from valvular heart disease, atheroma or Bright's disease. Ophthalmoscopic examination reveals a characteristic picture. The retina is greyish and oedematous and the macula shows itself as a central "cherry red spot". Treatment aims at dilating the artery in the hope that the embolus will be driven into one of the smaller arterial branches, thus reducing the extent of the damage. Massage of the globe, subconjunctival injection of 1/2cc. Acetylcholine 2% and paracentesis are the measures usually taken.

In thrombosis of the retinal vein, though vision is much impaired, light perception remains for some time. Ophthalmoscopic examination reveals enormous large haemorrhages and a swollen blurred disc. The arteries are thin. The patient is generally elderly and is suffering from arteriosclerosis, diabetes or nephritis. Focal infection may give rise to it in young people. In a certain percentage of cases intraocular tension rises and glaucoma develops.

Acute retrobulbar neuritis is one other cause of sudden impairment of sight. Central vision is mostly affected, the loss is rapid and may proceed to complete blindness. The patient is usually young. Disseminated sclerosis is generally the most common cause. Sight may return to normal or the recovery may be partial.

The impairment of vision may be gradual. Lens changes such as nuclear sclerosis, and the development of central and peripheral lenticular opacities lead to the formation of a cataract. The patient notices that vision is getting misty, until light can only be perceived. Sight can only be restored by the removal of the altered lens.

Patients are often mystified by observing that, though their vision for distance is good, they are unable to read or sew. The disability is usually attributed to all sorts of causes. There is great reluctance on the part of the patient that it is due to the passing of time. The lens becomes harder, sclerosed and less easily moulded. As a consequence of this, the power of accomodation, that is the ability to see things at close range, becomes weaker. The patient is relieved by the prescription of a convex lens of suitable strength.

The doctor is sometimes consulted for double vision. The development of diplopia may be sudden and the patient is very worried by seeing two of everything he looks at. Arteriosclerosis, high blood pressure or diabetes are often present. Thrombosis in the region of the nuclear centres of the midbrain, controlling the movements of the eyes, may be the cause. The patient is relieved by keeping one eye covered. Very often the condition improves after some weeks.

Mothers are sometimes much alarmed

by the movements of their childrens' eyes. They notice that whilst one eye looks straight, the other deviates inwards or outwards. This may start at birth or soon after. It may however appear when the child is three years old, after an attack of one of the enanthemata. An examination of the eyes after pupillary dilatation is necessary to exclude lesions in the fundus. If the child is very young, a tonic should be given to impress upon the mother that something is being done. If the child is old enough to carry glasses, correction of the refraction is often quite enough to improve the squint. It is usually necessary to give the child a course of orthoptic exercises. Vision in the deviating eye is improved by special training and the child is taught to look straight with both eyes. In unsuccessful cases the squint may have to be corrected by means of an operation.

Two further affections remain to be considered, the "sticky eye" and the "watering eye". In the former, the patient complains that in the morning the lids are glued together and that he feels as if there is sand in the eyes. Examination of the eye shows an inflammatory condition of the conjunctiva, which is red and congested. There is also some discharge along the lid margins and inside the eye. The pathological process soon shows quick improvement upon frequent installations in the conjunctival sac of guttae penicillin or guttae sulphacetamide 30%.

"Watering eyes" is a common complaint of middle aged and old people. In many cases, it is due to the general relaxation and loss of elasticity of the tissues brought about by old age. A varying degree of blockage of the lacrimal passages is the cause in other cases. The instillation of mild astringents such as zinc sulphate (½ gr. to ½ oz.) and Adrenaline Hydrochlor 1/1000 may bring some relief. However syringing of the lacrimal passages with boric lotion is often necessary. Surgical intervention, by establishing a communication between the lacrimal passages and the nose is the only treatment in a good number of cases.