Thyroid eye disease

Thyroid eye disease happens when the body's own immune system attacks the tissues of the thyroid gland and the eye socket. This is an *autoimmune condition*.

The symptoms of thyroid eye disease include the tissues around and behind the eye becoming inflamed and swollen, which can cause your eyelids and the white of the eye to become red and swollen, and cause prominent or protruding eyes, which is known as proptosis. The inflammation can cause lots of different symptoms including, pain and redness, double vision and pain on moving your eyes, difficulty closing the eyelids, eye ache and headache. Very occasionally, in very severe cases it can affect the vision and even cause sight loss.

Although most people with thyroid eye disease have a history of an over- or an underactive thyroid gland, this is not always the case. Some people with thyroid eye disease will develop the thyroid problems later and a few will never develop it at all. Other people may have had thyroid function problems for many years before eye problems develop.

Thyroid eye disease more commonly affects women aged 20-30 than men, although it does also occur in men and can occur at any age, even in children. Two other factors that affect the severity of the disease are the thyroid gland activity, which is discussed in another video, and smoking. Good control of your thyroid gland is very important. Smoking seriously worsens the severity of thyroid eye disease and increases the risk of vision loss. If you smoke, you should stop (or at least cut back) and we would suggest you see your GP if you need help with this.

Most cases of thyroid eye disease are mild and last only a few years, needing no treatment, or just lubricant eye drops to reduce discomfort. But, more severe thyroid

eye disease may need to be treated. The inflammation can be reduced by the use of powerful immune system suppressing drugs, like steroids, or by low doses of radiotherapy. Radiotherapy is similar to that used for treatment of tumours but here, is used at a much lower dosage so side effects are rare. Occasionally surgery is required to reduce the pressure behind the eye.

Inactive thyroid eye disease is when the inflammation has settled down, but tight, enlarged eye muscles and fatty tissue behind the eye remains. Although the inflammation has subsided, unfortunately you may still have double vision, dryness and discomfort and prominent, or proptosed, eyes, all of which can be uncomfortable and make you feel self-conscious. Double vision may be helped with prisms which are special lenses fitted on or in your glasses or by surgery on the eye muscles. Orbital decompression and eyelid surgery may be used to reduce the proptosis.

Orbital decompression involves removal of one to three of the four bony walls of your eye socket to create more space for the inflamed orbital tissues. Some of the swollen orbital fat is also sometimes removed. This can be used in sight threatening thyroid eye disease to reduce the pressure on the nerve that supplies the eye and therefore improve the vision, or in post-inflammatory thyroid eye disease, to improve the comfort and appearance of protruding eyes.

There are different surgical techniques for decompression surgery and the precise procedure will depend on your situation and the surgeon. Sometimes an incision is made at the outer angle of the eyelids and the scar fades into the natural creases. Sometimes the surgery is done endoscopically (up the nose) and sometimes both are required. The surgery is a major procedure and the small size of the incision must not give the idea that it is a minor operation, although usually a very successful one.

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