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Thyroid Eye Disease

Νόσος του Graves



Θυρεοειδής

because sight is precious

Thyroid Eye Disease

Thyroid eye disease (TED), also known as Graves' disease, is an autoimmune inflammatory disorder affecting the tissues within the eye socket. It can cause pain, swelling, redness, watering, retraction of the upper eyelids giving a staring appearance, bulging eyes, double vision and occasionally decreased vision.

TED is usually caused by Graves' disease, a condition that causes over activity of the thyroid gland. However, this condition can be occasionally associated with Hashimoto's disease or hypothyroidism. TED may occur before or after the onset of systemic hyperthyroid disease and can start suddenly or more slowly. Even though some patients undergo spontaneous remission of symptoms within two years, many need treatment. The active disease course can be prolonged up to 3 years in smokers. Smokers are also at greater risk of sight threatening disease and poorer response to treatment.

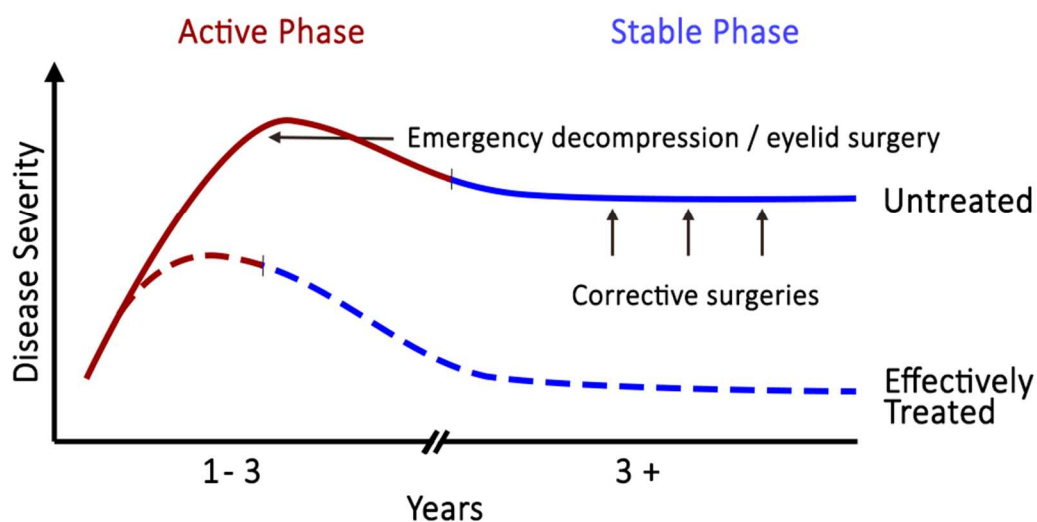
The first step of treatment aims to regulate thyroid hormone levels and to stop smoking. Most patients are advised to take Selenium supplements 200mcg once daily for 6 months. Lubricating eye drops are used to avoid damage to the eye. In moderately active disease, signs or symptoms increase and include double vision. Steroids, usually given intravenously, are effective but are used conservatively because of their side effects. Steroids do not reverse the disfigurement caused by the disease but is effective in controlling pain and improving problems with double vision caused by inflamed eye muscles in many cases. In severe cases (3-5%), the patient experiences

intense pain, decrease of vision and loss of colour vision. These occur as a result of sight-threatening corneal ulceration or compression of the optic nerve. This is an emergency requiring immediate treatment.

After the active stage of the disease where the eyes are red and painful the patient may be left with double vision, bulging or staring eyes. These are all amenable to surgery but it may take some time (usually many months to years) for all the treatment to be completed.

TED is a rare but treatable disease that causes a significant decrease in quality of life. Therefore it should be managed with endocrinologists and ophthalmologists working closely together to decide on the best management for you.

Disease Time Course and Intervention Strategy



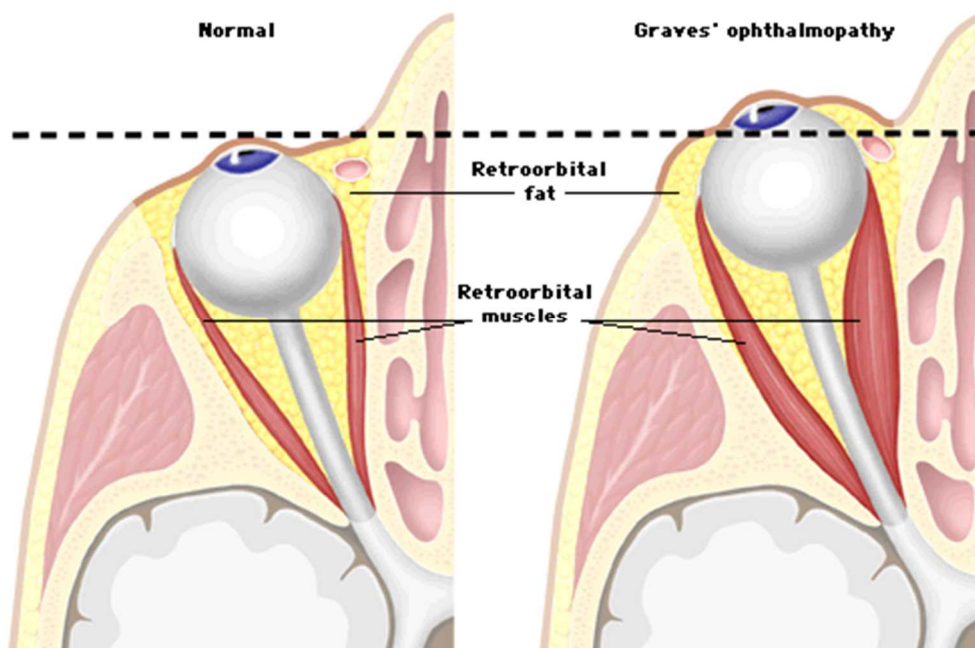
Steroid Treatment for Thyroid Eye Disease

You have been recommended to start intravenous steroid treatment for TED due to the significant level of inflammation (moderately active disease) in your eye socket(s) that is causing pain and / or double vision. Steroids are strong drugs and need to be administered in a hospital setting as an infusion into your vein as a day case admission. You are usually admitted under the care of your endocrinologist / thyroid doctor who will be responsible should any systemic complications arise from the treatment. This is a 12-week course of treatment with one infusion given every consecutive week. During the first 6 weeks, you will be receiving 500mg methylprednisolone per session and the following 6 weeks the dose will be decreased to 250mg methylprednisolone.

Intravenous steroids are preferred rather than oral steroid tablets because they are more effective in treating TED and have a better safety profile. Steroids do not reverse the disfigurement (bulging eyes and retracted eyelids) caused by the disease but are effective in controlling pain and improving double vision caused by the inflamed eye muscles.

During the treatment you will need to be monitored in the eye clinic at 2-3 weekly intervals and if you experience double vision you will be seen by an Orthoptist, a specialist technician who measures eye movements. Usually this will take place before / soon after starting your steroid treatment so that we have baseline measurements to monitor your progress with the treatment.

If you experience intense pain, decrease in vision and loss of color vision this is considered an emergency and may require immediate treatment. You will need to contact the eye clinic for an urgent review.



Check list for intravenous steroid treatment:

- 1 Check renal and liver function pre-treatment
- 2 Check blood pressure and blood sugar pre-treatment
- 3 Orthoptic assessment
- 4 Optic nerve assessment with visual fields and OCT optic nerve
- 5 Monitoring of blood pressure and blood sugar at each session
- 6 First six weeks . 500mg methylprednisolone diluted in 500mls of normal saline and administered over 1 hour
- 7 Last six weeks . 250mg methylprednisolone diluted in 500mls of normal saline and administered over 1 hour
- 8 Ophthalmic assessment for response at week 3 and week 9 of the treatment regime



Is an affiliated clinic and provides teaching facilities to



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