Shalamar Hospital is striving to provide our patients quality health care, at lowest possible costs.
 Our hospital is continually active in pioneering new treatments and therapies to improve the lives of people in our community.



Here are some key points to keep in mind regarding TED:

- There are many treatment options available, ranging from artificial tear drops to surgery.
- Smoking can increase your risk of developing TED, and continuing to smoke can make treatment less effective. Talk to your doctor about strategies to quit smoking.
- Consistently taking thyroid medication and regularly monitoring thyroid levels can help prevent fluctuations that can worsen TED symptoms.
- TED can have a significant impact on psychological and social well-being, and it's important to seek advice from your doctor.
- If your TED symptoms become more severe, it's important to be referred to a specialist eye center with experience treating TED.



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Guide to Thyroid

Guide to Thyroid Eye Disease

Thyroid Eye Disease (TED) is a medical condition that involves inflammation of the muscles surrounding the eye, eyelids, tear glands, and fatty tissues behind the eye. This inflammation can result in redness, swelling, and discomfort in the eyes and eyelids, as well as "staring" or "bulging" eyes. In some cases, TED can also cause double vision due to stiffness and swelling of the eye muscles, and it can rarely result in reduced vision or eye ulcers. TED is an autoimmune condition, also known as Graves' Orbitopathy or Ophthalmopathy, caused by the immune system attacking the eye tissue, resulting in inflammation in the tissues surrounding and behind the eye. TED commonly occurs in individuals with Graves' disease, a thyroid condition that results in either overactivity or underactivity of the thyroid gland, but can also occur in individuals with a normally functioning thyroid or after treatment for Graves' disease. People with TED require the care of an ophthalmologist and an endocrinologist.

The likelihood of developing Thyroid Eye Disease (TED) depends on whether an individual has Graves' disease and other factors such as smoking. Generally, around 25% of people with Graves' disease develop TED at some point during the course of their thyroid disorder. TED can occur before, during, or after Graves' disease diagnosis. While most cases of TED are mild, individuals who smoke have an increased risk of developing the condition. Non-smokers or ex-smokers without TED symptoms at the time of Graves' disease diagnosis have a low risk of developing TED, with less than one in ten chance. However, smokers are twice as likely to develop TED, and heavy smokers have an eight times higher risk compared to non-smokers.

If you are experiencing any of the following symptoms, such as a change in the appearance of your eyes (usually staring or bulging eyes), a feeling of grittiness in the eyes or excessive dryness, watery eyes, intolerance to bright lights, swelling or feeling of fullness in upper or lower eyelids, new bags under the eyes, redness of the lids and eyes, blurred or double vision, pain in or behind the eye (especially when looking up, down or sideways), or difficulty moving the eyes, it is recommended that you see a doctor and inquire if you might have TED.

It is important to note that if you have puffy eyelids and puffy skin around and under the eyes and you have a severely underactive thyroid, this is most likely not TED, and it should improve once you are properly treated with levothyroxine.

Diagnosing TED can be challenging, and patients may initially be

treated for other conditions such as conjunctivitis, allergy, or hay fever before the correct diagnosis is made. However, some signs that suggest the diagnosis may be TED instead of any of these conditions are: symptoms occurring during the wrong season for hay fever, the lack of itchiness in the eyes (which is typical for allergies), absence of sticky eyes (typical for conjunctivitis), presence of an ache or pain in or behind the eye (especially when trying to look up or sideways), and sometimes double vision.

IS THERE ANYTHING I CAN DO TO PREVENT TED FROM GETTING WORSE?

There are several things you can do to help prevent Thyroid Eye Disease (TED) from getting worse. If you smoke, quitting is one of the most important steps you can take. Continuing to smoke can make your TED symptoms worse and decrease your response to treatments. Non-smokers or those who have quit smoking are more likely to be cured of their thyroid overactivity than smokers. There is no research yet on vaping and TED, but quitting altogether is the safest option for both your TED and general health.

To avoid fluctuations in your thyroid levels, particularly hypothyroidism, make sure to have regular thyroid blood tests and follow your doctor's advice about when and how to take your thyroid medication. This will ensure that your thyroid levels remain steady, which can improve how you feel and give your eyes the best chance of healing.

If you have active TED, it's important to avoid radioiodine treatment as it can worsen your symptoms, especially if you are a smoker. Discuss with your doctor what special precautions may be required or whether treatment should be delayed.

Recent evidence suggests that patients with mild active TED may benefit from taking selenium supplements for six months at a dose of 100mcg twice daily. You can buy these supplements over the counter, but it's important to consult with your doctor first. TED can have a negative impact on your psychological and social well-being, as it is commonly known. Fluctuating thyroid levels may cause anxiety, irritability, mood swings until hormone levels stabilize. Changes in the appearance of your eyes may cause anger, loss of self-esteem, confidence, or social isolation. Relationships at work and socially may also be affected, as the eyes and face are the most significant point of contact between individuals. This is understandable since TED can alter your facial appearance and expression, which may impact the way others react to you. However, treatment, including surgery, can often improve this, and counseling or support from others who have TED can help you develop coping strategies.

What options are available to treat TED? For mild cases where symptoms include discomfort in bright lights, watering, and gritty sensations, artificial tear drops can be used in the form of drops, gels, or ointments to alleviate symptoms and protect the eyes. However, symptoms may worsen in the first 6 to 12 months before stabilizing or improving, and inflammation may require treatment with steroids to reduce redness and swelling. Steroids can also help inflamed eye muscles move more freely and potentially restore eyesight. However, they are less effective in reducing eye protrusion. Steroid treatment may be combined with other treatments like immunosuppressive agents or radiotherapy to control the condition effectively and avoid relapse. In cases where double vision or a change in eye appearance is permanent, rehabilitative surgery may be required, such as decompression surgery, eye muscle surgery, or eyelid surgery to protect the eyes. Other treatments like prisms attached to spectacles or temporary eye patches may also be used to treat double vision.

If you notice that your TED symptoms are worsening, it is important to seek medical attention. Although severe cases of TED are rare (less than 5% of people), they can result in disabling double vision, corneal ulcers, and, in rare cases, vision loss due to compression of the optic nerve. Early diagnosis of these complications is essential for successful treatment.

If you experience any of the following symptoms, you should see your doctor right away and ask for a referral to an eye specialist with experience in treating TED:

• Your symptoms are getting worse over a period of several days or weeks.

• You have blurred vision that does not improve with blinking or covering each eye.

• You notice a difference in how bright colors appear between your two eyes.

• You see double when looking forwards or downwards.

 $\mbox{ \ }$ You need to tilt your head sideways or backwards to avoid double vision.