

Patient Education Series

Thyroid Eye Disease

© Dr Roshmi Gupta, MS, FRCS

If you are reading this, there are chances that you, or someone close to you, is suffering from thyroid dysfunction. In this, we aim to give you information about a complex condition; we believe that a well-informed patient takes the best decisions for his well-being.

Q. Who gets thyroid eye disease (TED)?

A. Most commonly, patients with hyperthyroid (over-active thyroid) suffer from thyroid eye disease. But the disease is also seen in hypothyroid patients (underactive thyroid). A small percentage of the patients have TED, without ANY other sign of thyroid disease in the body. It is estimated that more than half the patients with thyroid disease develop TED at some time. This may be before, after, or at the same time as the systemic thyroid disorder.

Q. What other factors affect the eye condition?

A. Smoking makes the disease worse; quitting cigarettes helps to control the disease. Hormonal changes in women, pregnancy or menopause can make the disease worse. If you are undergoing radio-iodine treatment for thyroid, the disease may become temporarily more severe. Your doctor will watch you more closely during this time.

Q. How does thyroid eye disease affect the eye?

A. In mild disease, the eye can feel gritty, reddish, itchy. In moderate disease, there can be occasional double vision, a 'bulging' appearance of the eye, difficulty in closing the eye. The patient can feel pain around the eye, and 'pressure' on the eye. In severe disease, the vision may decrease, the eye may have severe redness, pain and watering, and develop an ulcer.

In the late, inactive stage of the disease, the eye can have a changed appearance, and a 'staring, bulging' look.

Q. What is the treatment for thyroid eye disease?

A. Your physician is taking care of the thyroid disease in the body. If it is well-controlled, it also helps the eye disease; however, extra care is required for the eye.

Thyroid eye disease is best treated by an ophthalmologist who specializes in the problem. Initially you may use simple measures to keep yourself comfortable: mild pain-killers, cool compresses, tear substitutes, and elevation of the head-end of the bed while sleeping, are beneficial. Do stop smoking if you have the habit. The doctor may advise a CT scan to see the extent of the disease. The doctor will watch you for any sight-threatening feature; pressure on the optic nerve may need treatment with steroids.

Q. How often do I have to have a check-up?

A. In mild thyroid eye disease, a regular check every three to six months is sufficient. When there are problems with the vision, consult with the doctor immediately.

Q. How will I know there is a threat to my vision?

A. Watch for the following signs-

1. The eye does not close well, with redness, pain, watering, and/or a white spot on the black part of the eye.
2. Vision is not clear. The earliest way to detect it is to look at a bright red object every day, one eye at a time. If the red looks muddy and dull instead of bright red, please contact your doctor immediately.
3. Watch for double vision, i.e., one object appearing like two.

Q. My appearance has changed. Will I always look like this?

A. When the disease is stable, in about 6 to 12 months, reconstructive surgery can be done to return you to your normal, pre-disease appearance. You do not need have the 'staring' appearance just because you had a thyroid problem. In the meanwhile, temporary measures like a small dose of botulinum toxin injection into the eyelid can keep you looking almost normal.



Thyroid eye disease patient, before (left) and after (right) injection of botulinum toxin.



Thyroid eye disease patient before (left) and after (right) surgical decompression

About the author: The author is an ophthalmologist who has super-specialty training in ophthalmic plastics and orbital disease from the prestigious LV Prasad Eye Institute Hyderabad, and Plastic Eye Surgery Associates, Texas, USA. She has been Visiting Professor at John Moran Eye Center, Salt Lake City, USA. She has practiced the specialty, with interest in thyroid eye disease, for nearly 7 years. She has over 30 publications in journals and text books. She has made scientific presentations, and been invited faculty at multiple international and national ophthalmic meetings. For any query, you can contact her at roshmi.gupta@gmail.com.

Dr Roshmi Gupta