

# What is Thyroid Eye Disease?

Thyroid eye disease, or TED, is a relatively rare condition among the list of conditions that can impact your eyes. According to the American Academy of Ophthalmology, the disease only affects 19 of every 100,000 people - 16 women and three men. Nevertheless, the condition can pose some alarming and potentially severe physical appearance and vision complications.

Sara Wester, M.D., an ophthalmologist with the Bascom Palmer Eye Institute, part of the University of Miami Health System, says that TED is most commonly linked with Graves' disease. This condition leads to an overactive thyroid (hyperthyroidism) and other complications such as goiter. However, it can also occur in patients with hyperthyroidism who do not have Graves' disease and patients with an underactive thyroid (hypothyroidism). "It's more common in women, but often men present with more severe disease," says Dr. Wester. "In addition, while it most commonly occurs in two age peaks, between 40 to 49 and 60 to 69, it can present at any age, including in children."

## Alarming symptoms

Thyroid eye disease causes changes in the tissues (fat and muscle) around and behind the eyes. As it worsens, this can lead to several concerning symptoms for the patient, including bulging eyes, eyelids that don't close properly, and other complications. Over time, the British Thyroid Foundation says that the excess pressure on the eyes can cause them to become red, swollen, and uncomfortable. The bulging eyes and eyelid retraction can lead to dryness, pain, and irritation, affecting vision. In some cases, the eyes may no longer move in line with one another, leading to double vision. Also, reduced vision can occur in rare cases due to pressure on the optic nerve.

## Lower your risk for thyroid eye disease

Though some of the factors related to TED risk, such as gender and age, are out of your control, Dr. Wester says there are still a few things you can do to lower your risk. “Smoking is the number one modifiable risk factor,” she says. “Patients who smoke have a 7 to 8 times higher risk of developing TED than nonsmokers, and the symptoms are also worse in smokers. I also try to warn my patients about the risks of secondhand smoke.”

Also, if you have existing thyroid problems, Dr. Wester says that it’s imperative to manage those conditions to reduce your risk of developing TED in the future. “Radioactive iodine, which is one of the treatments for systemic thyroid disease, can actually increase the risk of developing thyroid eye disease in certain patients,” she says. “It’s important to speak with your doctor about these concerns if you are actively treating a thyroid condition.”

## How is thyroid eye disease treated?

Though TED is certainly a concerning condition for those at risk of developing it, the good news is that some significant treatment breakthroughs have occurred in recent years. A new class of drugs shows promise in resolving problems and reducing the need for surgery in patients where TED is detected and treated early.

One treatment, in particular, Tepezza (teprotumumab-trbw), was approved for TED treatment by the FDA in 2020. Dr. Wester and the Bascom Palmer Eye Institute were involved in the clinical trials that led to the medication’s approval. “The medication was very effective in treating individuals who have had TED for nine months or less,” says Dr. Wester. “It was effective when compared to placebo not only in reducing proptosis (bulging) but also in improving double vision and the physical signs and symptoms around the eyes that occur with TED.”

The jury is still out on how this new medication will impact patients with more chronic thyroid eye disease, but Dr. Wester says that some of the anecdotal evidence looks promising. Also, research into other drugs like Anti-FcRN antibodies shows positive results in treating TED. Though thyroid eye disease continues to be a difficult diagnosis, there is a lot of hope for the future when it comes to managing and treating the condition.

---

*Wyatt Myers is a contributing writer for UMiami Health News.*

---

## **LEARN MORE**



### **Tips for managing thyroid eye disease**

If you suffer from TED, there are other things you can do to help relieve symptoms. Dr. Wester provides some tips including sleep modifications and how to best support your eye health.