

Aravind - Madurai 1, Anna Nagar, Madurai - 625 020

Aravind - Theni Periyakulam Road, Theni - 625 531

Aravind - Tirunelveli Swamy Nellaiappar High Road, Tirunelveli - 627 001

Aravind - Coimbatore Avinashi Road, Coimbatore - 641 014

Aravind - Pondicherry Cuddalore Main Road, Thavalakuppam Junction, Pondicherry - 605 007

> Aravind - Dindigul 31A, New Agraharam, Palani Road, Dindigul - 624 001

Aravind - Tirupur Dharapuram Main Road, Chettipalayam Post, Tirupur - 641 608

Aravind - Salem Kaliamman Kovil opp, Sankagiri main road, Nethimedu, Salem - 636 002

Aravind - Tuticorin Meenakshipuram West, Near Old Bus Stand, Tuticorin - 628 002

Aravind - Udumalpet 112, Dhalli Road, opp Palaniandavar Mills Udumalpet - 642 126

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# THYROID Eye Disease



Early treatment is essential to protect the cornea and the optic nerve from getting permanently damaged.



ARAVIND EYE CARE SYSTEM

Eye is located in a bony socket known as the orbit. In addition to the eye, orbit contains muscles (which move the eye), optic nerve (which has visual function) and fat. In thyroid eye disease, amount of fat in orbit increases and muscles get thickened. As a result there is forward protrusion of eyes. This protrusion stretches the optic nerve and in extreme cases optic nerve may even be damaged. If the protrusion is too much, lids may not be able to cover the cornea and corneal ulceration may result. Eye muscles lose some of their action due to abnormal thickening and this leads to deviation of eye and double vision.

Thyroid eye disease occurs mostly in people suffering from thyroid disorders, which may be either excessive or less production of the thyroid hormone. However, some people may have this disease with a normally functioning thyroid gland. The disease usually occurs in middle age at around 40-50 years. Women are more likely to be affected than men. Smoking increases the risk of this disease.

### **Symptoms**

- Dryness of eye
- Swelling of eyelids
- Frightening and/or staring look
- Forward protrusion of eye balls
- Inability to close eyes
- Decrease in vision may occur when optic nerve is affected
- Double vision and decreased eye movements when eye muscles are affected

## Investigations

The presence of thyroid eye disease is confirmed by orbital ultrasound. A CT scan may be needed in few cases. In addition, any person suspected of having thyroid eye disease should undergo a blood test to know thyroid hormone levels.

### **Treatment**

Early treatment is essential to protect the cornea and optic nerve from getting permanently damaged. In initial stages, lubricating drops are used to keep the eye moist. Most of the patients are initially given steroid tablets for a few months to control progression of the disease. Closure of lids may be required if they are not able to close eyes fully. The closure is temporary and is done only in outer part of lids, leaving the cornea clear so that vision is not affected. If protrusion of eyeball is too much, the optic nerve may be affected. At this stage, orbital decompression is advised. This surgery involves breaking one or more walls of orbit surgically, so that the extra fat which has deposited in orbit due to thyroid eye disease can be removed & eyeball can be pushed back into orbit. A patient having thyroid eye disease for a long time develops eye movement disorders and requires eye muscle surgery for proper functioning of muscles and for correction of squint.



Before Surgery

After Surgery

## **Risks of treatment**

Steroid tablets may cause gastric irritation, weight gain, puffy face, interference with blood sugar control in diabetes etc. Therefore, these are prescribed in as low dose as possible. Only a few patients are not able to tolerate this small dose, and in such patients surgery is advised. Orbital decompression surgery is safe but rarely may cause bleeding, infection, decreased eye movements and loss of vision