

# ***THYROID GLAND***

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**Physical examination**

**Dr. Adel M. Alrekabi**

It is located in the anterior triangle of the neck. It weighs about 20 grams

## **Blood supply**

1-Superior thyroid artery is first anterior branch of external carotid artery enters the gland near superior pole as a larger anterior superficial branch and a smaller posterior branch.

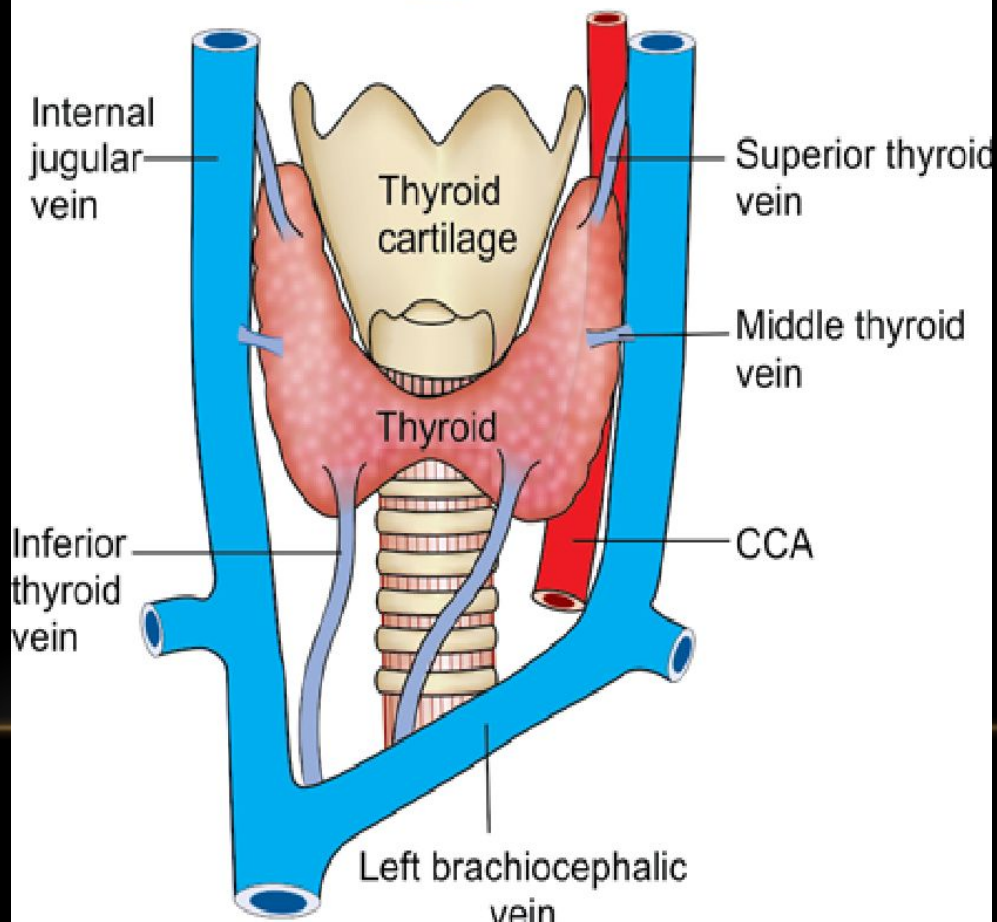
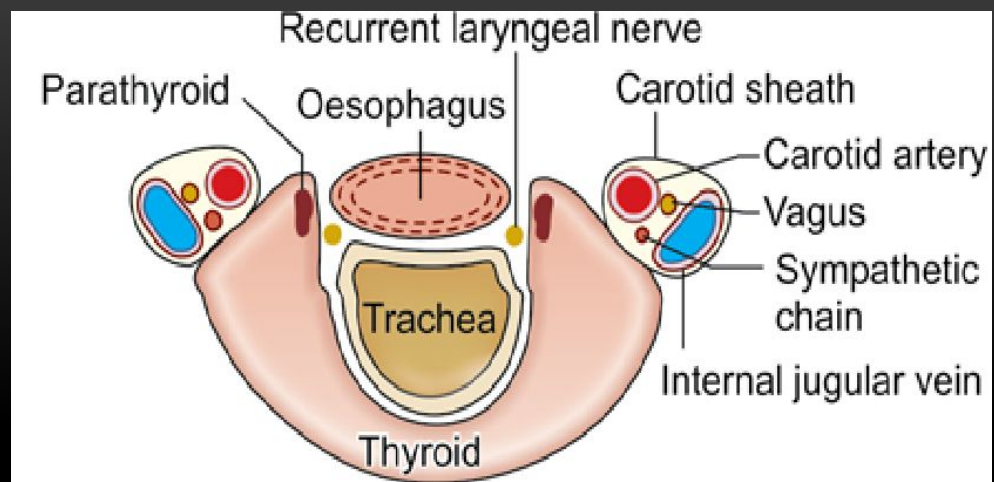
2-Inferior thyroid artery, a branch of thyrocervical trunk of subclavian artery passes behind the carotid sheath running medially reaching the posterolateral aspect of the gland.

3-Thyroidea ima artery, a branch of aorta or brachiocephalic artery enters the isthmus or lower pole of one of the lateral lobes (10%).

4-Tracheal and oesophageal branches serve blood supply to retained thyroid gland after thyroidectomy.

## Important Relations of Thyroid Gland

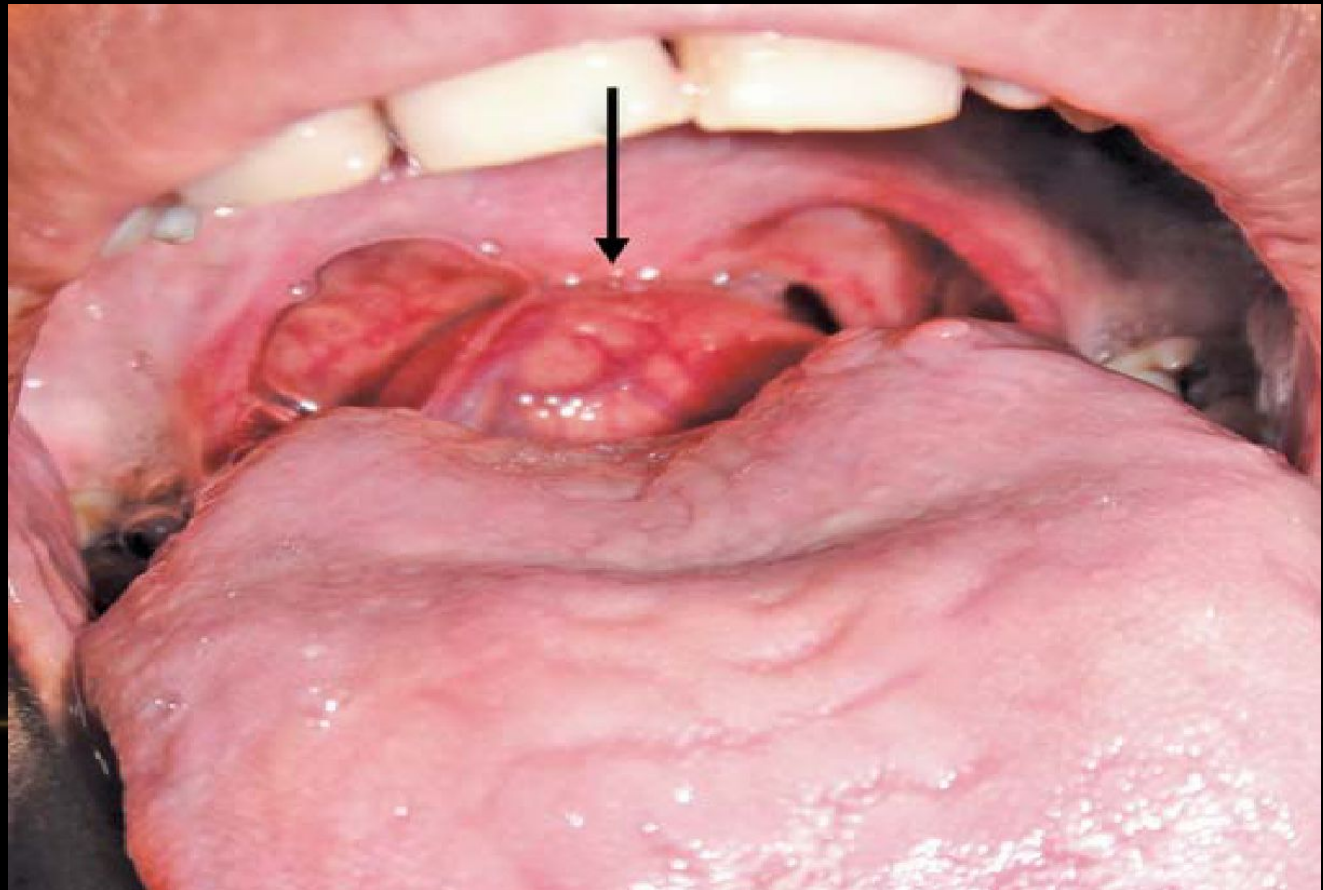
- 1- Recurrent laryngeal nerve lies in the tracheo oesophageal groove, in relation to Berry's ligament.
- 2- Superior laryngeal nerve which gives a branch, external laryngeal nerve supplies cricothyroid muscle. It accompanies superior thyroid artery.
- 3- Parathyroid glands—four in number, two on each side embedded in thyroid



## Lingual Thyroid

It is a thyroid swelling in the posterior third of tongue, at the foramen caecum, presenting as rounded swelling. It may be the only existing thyroid tissue which may cause:

- a. Dysphagia, pain, speech impairment.
- b. Respiratory obstruction, haemorrhage.
- c. 70% present as hypothyroidism, 10% as cretin.
- d. Common in females (3:1).



## Thyroglossal Cyst

Thyroglossal cyst is a swelling occurring in the neck in any part along the line of thyroglossal tract.

Possible sites for thyroglossal cyst

- a. Beneath the foramen caecum
- b. In the floor of mouth
- c. Suprahyoid
- d. Subhyoid—commonest site
- e. On the thyroid cartilage—2nd common site

Clinical examination:-

- a. Swelling in the midline, towards the left
- b. Moves with deglutition as well as with the protrusion of tongue. Patient is asked to open the mouth and keep the lower jaw still. Examiner holds the cyst between the thumb and forefinger. When the patient is asked to protrude the tongue, a “tugging sensation” can be felt.









# Examination of the thyroid gland

1-inspection

2-palpation

3-percussion

4-auscultation



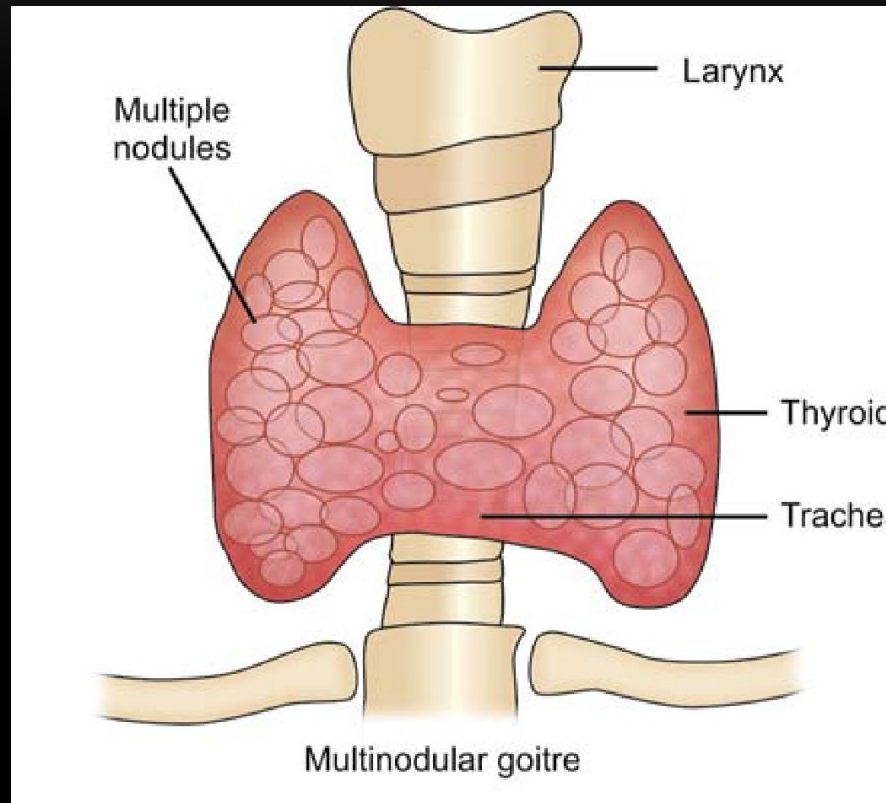
**Examination of the thyroid gland from behind for any nodules.  
Thyroid enlargement in male is rare. Nodule in a male could be  
malignant.**



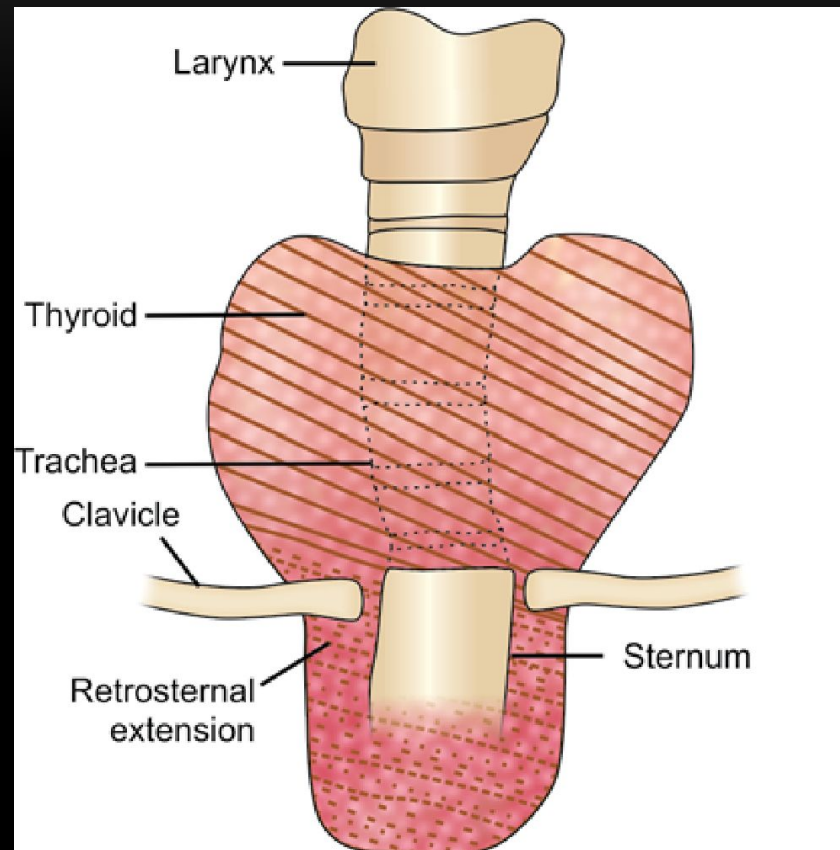


## Pendred syndrome: dyshormonegenesis with deafness







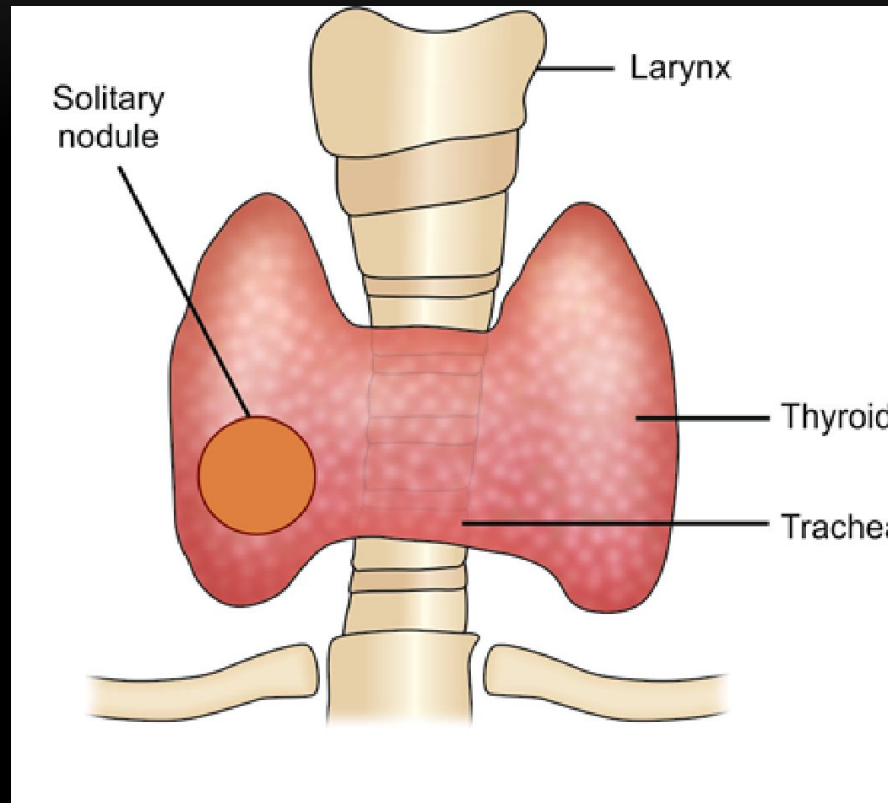


Multinodular goiter with retrosternal extension

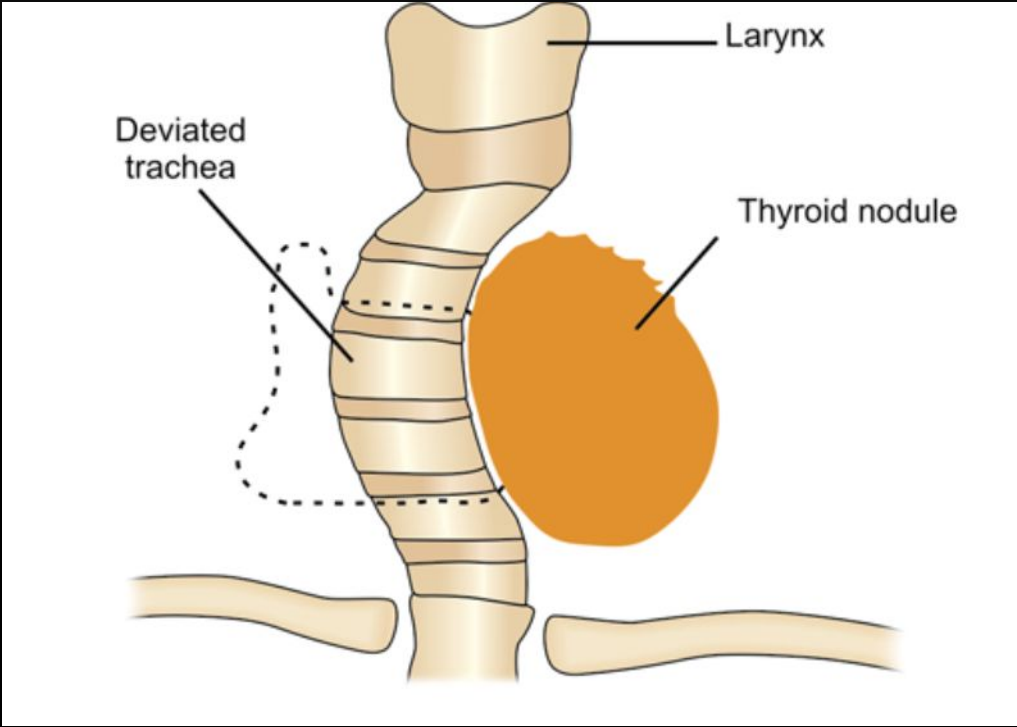


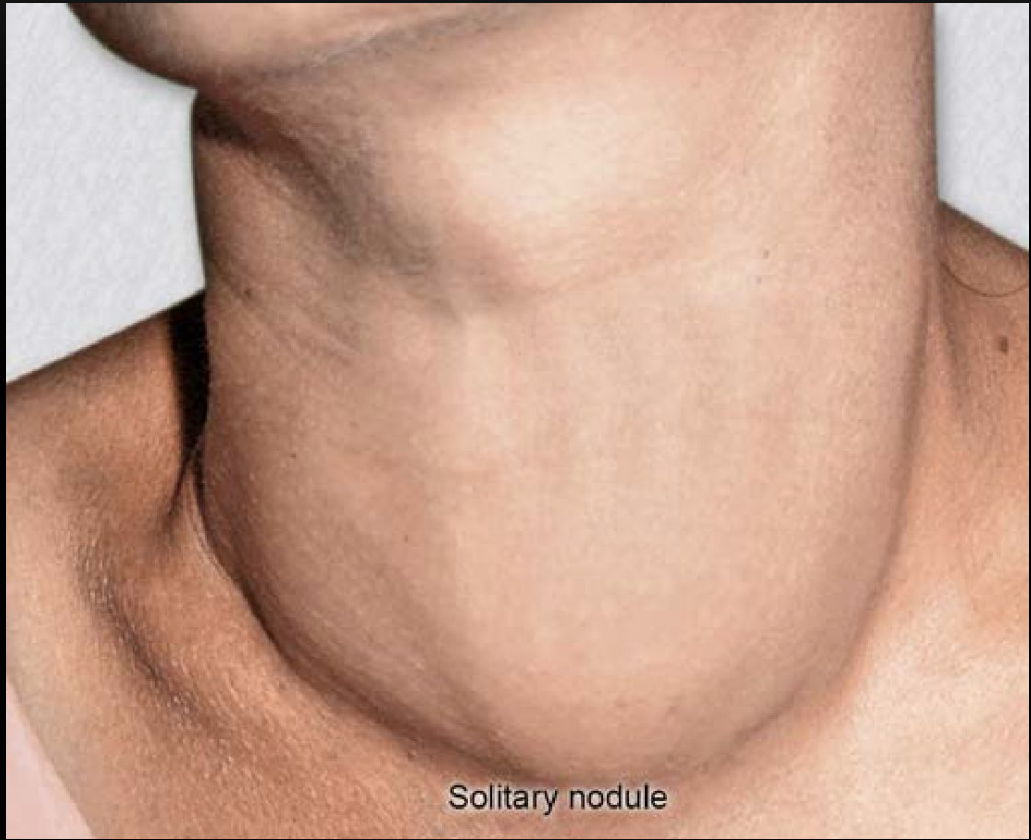












Solitary nodule





Normal

Upper eyelid between  
upper limbus and pupil



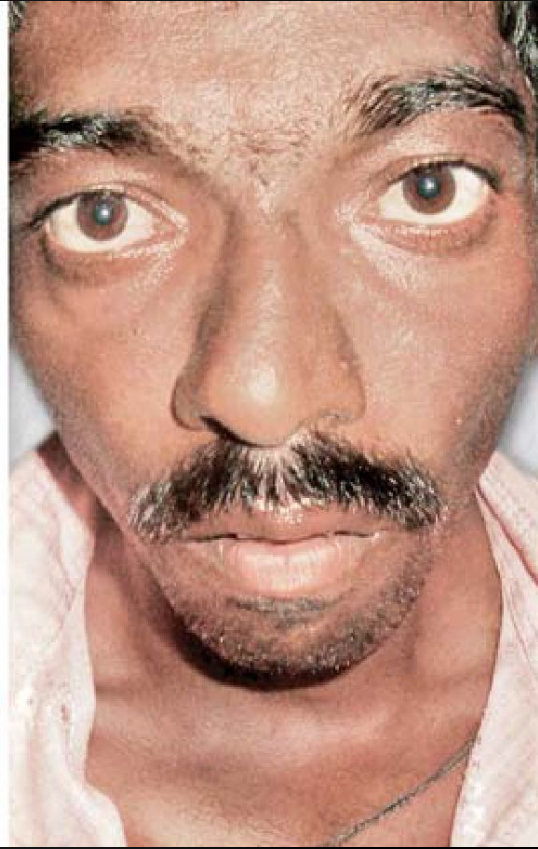
Lid retraction

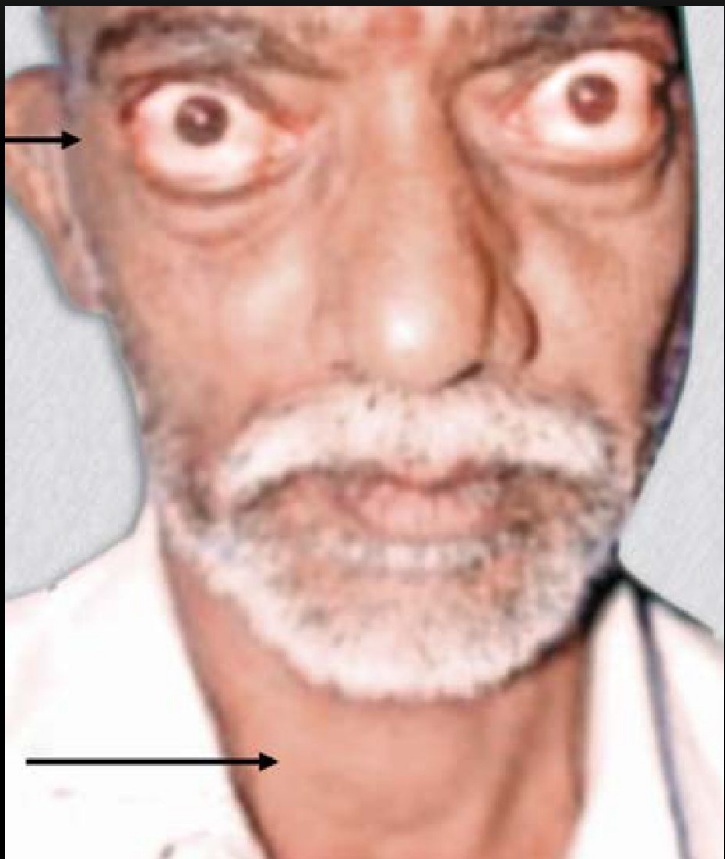
Upper eyelid raised  
lower eyelid normal



Exophthalmos

Both upper and lower  
eyelids away from the  
centre with visible sclera  
all around mainly below





## Malignant exophthalmos







