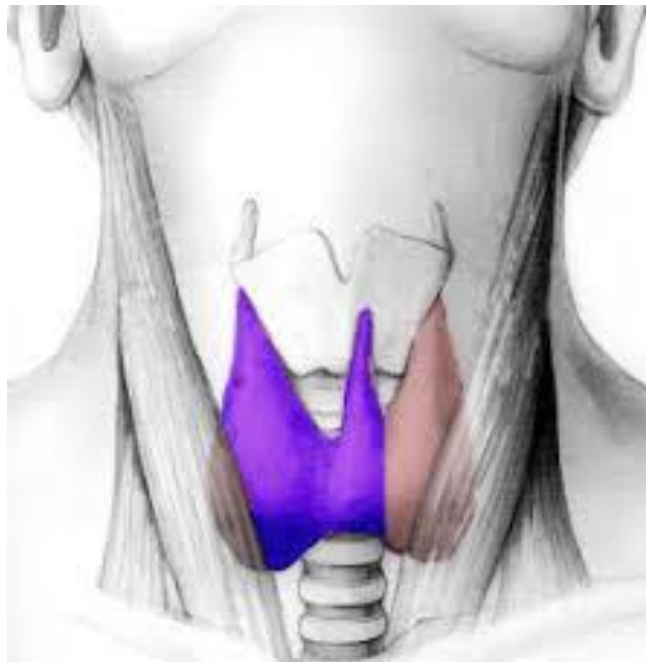


# Types of Thyroidectomy

★ Depending on the nature & extend of the pathology in the thyroid gland , thyroidectomy may be one of the followings :

## **1) Hemithyroidectomy :**

- **Method** : total lobectomy + isthmusectomy
- **Indications** :
  - Excision biopsy of solitary thyroid nodule .
  - Solitary toxic thyroid nodule .
  - Thyroid adenoma .
  - Carcinoma of thyroid less than 1cm in low risk patient .



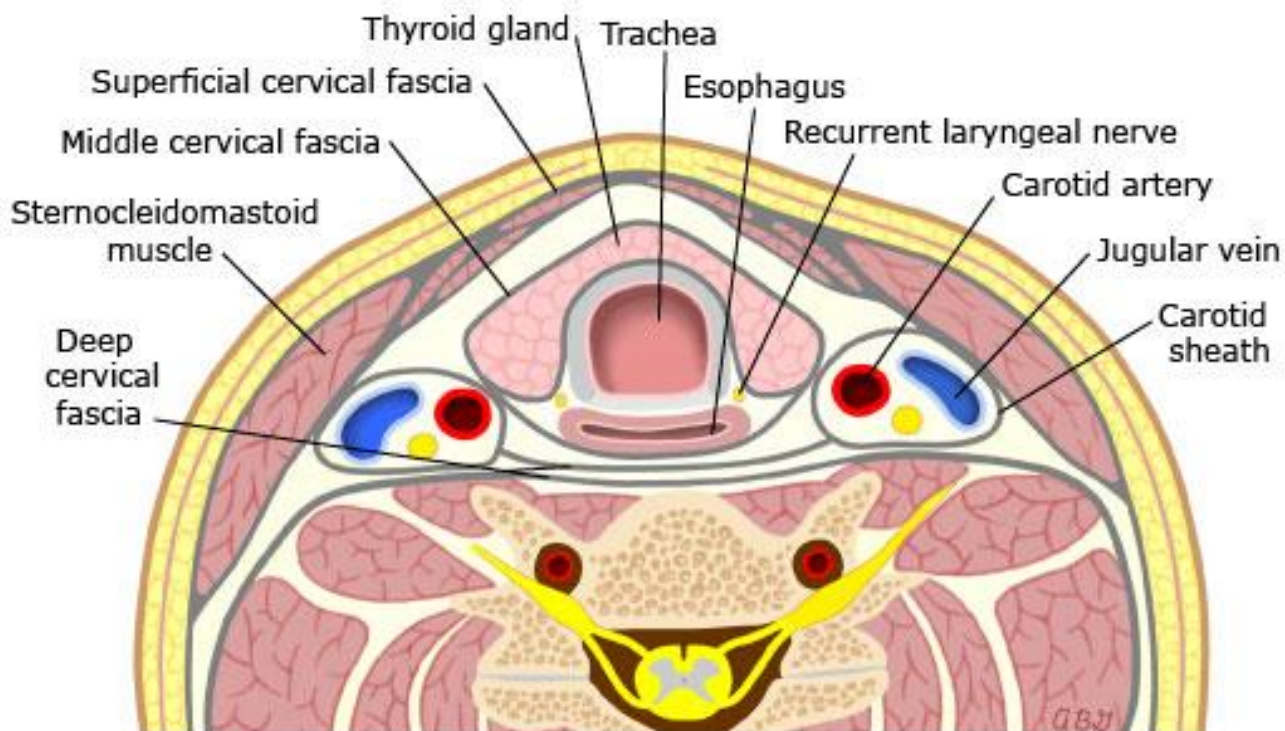
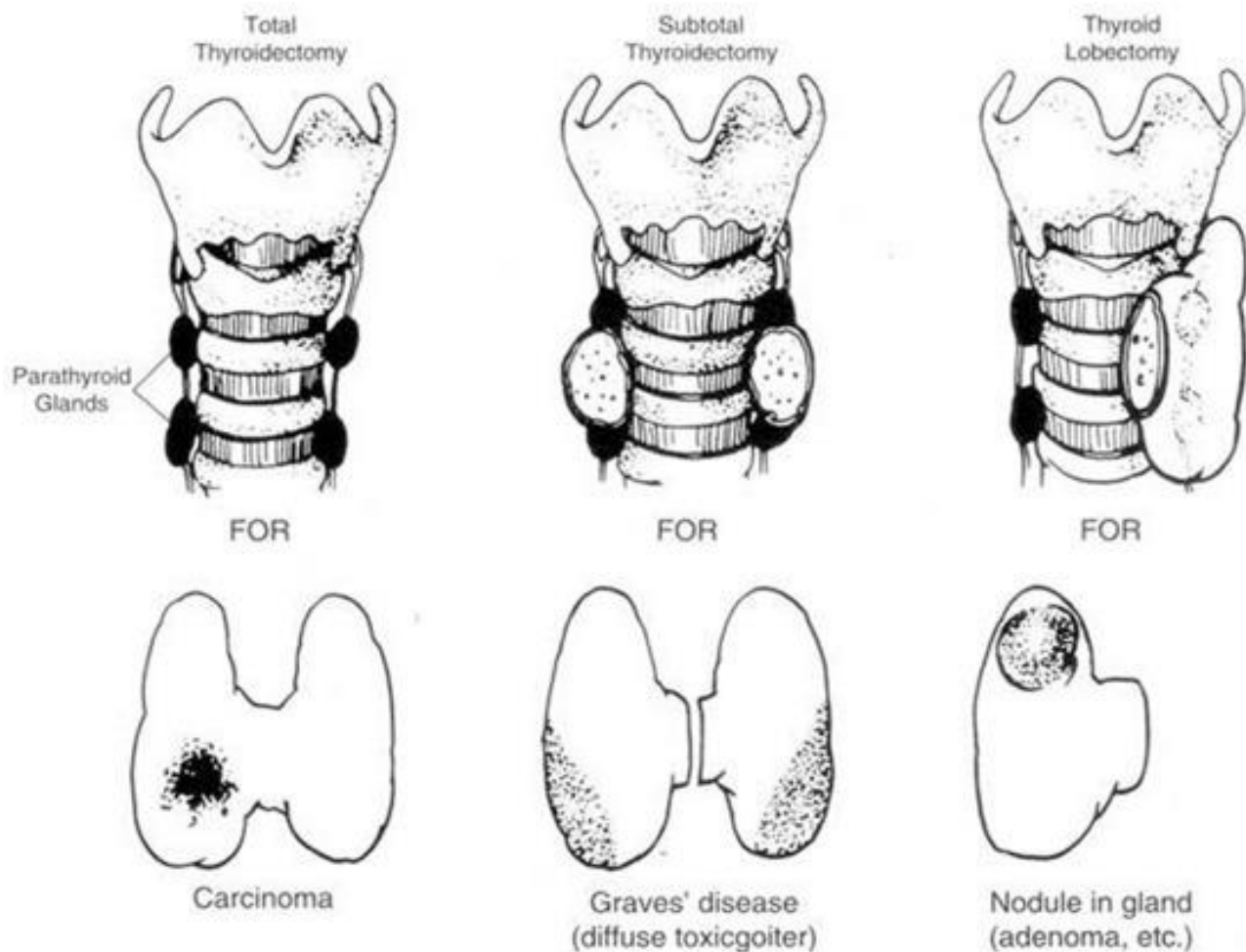
## **2) Subtotal thyroidectomy :**

- **Method** :Removal of thyroid gland except postero-medial part each lobe ( to preserve parathyroids and recurrent laryngeal nerves ) to prevent post-operative hypothyroidism .

- In simple nodular goitre leave on each side a part ***equal to a normal lobe*** (8 – 10 gm = 2 x 1 x 1 inch). In the past this operation is called partial thyroidectomy ,
- In primary or secondary toxic goitre leave on each side a part ***equal to a 1/2 normal lobe*** (4 – 5 gm = 1 x 1/2 x 1/2 inch = strip equal to thickness of a finger ).
- **Indications :**
  - Large colloid & simple nodular goitre .
  - 1<sup>ry</sup> & 2<sup>nd</sup> toxic goitre .
- **Disadvantage :** recurrence from the remaining thyroid tissues .

### ***3) Near total thyroidectomy :***

- **Method :**
  - Total lobectomy on the same side of the pathology + isthmusectomy + leave only the posterior part of the capsule with a thin rim ( 2gm) of thyroid tissue on the contralateral side of the pathology .
- **Indications :** (Rarely performed nowadays )
  - Unilateral operable carcinoma of thyroid less than 2 .
  - To avoid recurrence , **many experienced surgeons** prefer nearly total thyroidectomy for simple nodular goitre especially if there is marked pathology on the postero-medial part of each lobe .



#### 4) Total thyroidectomy : ( the most important time nowadays )

➤ **Indications :**

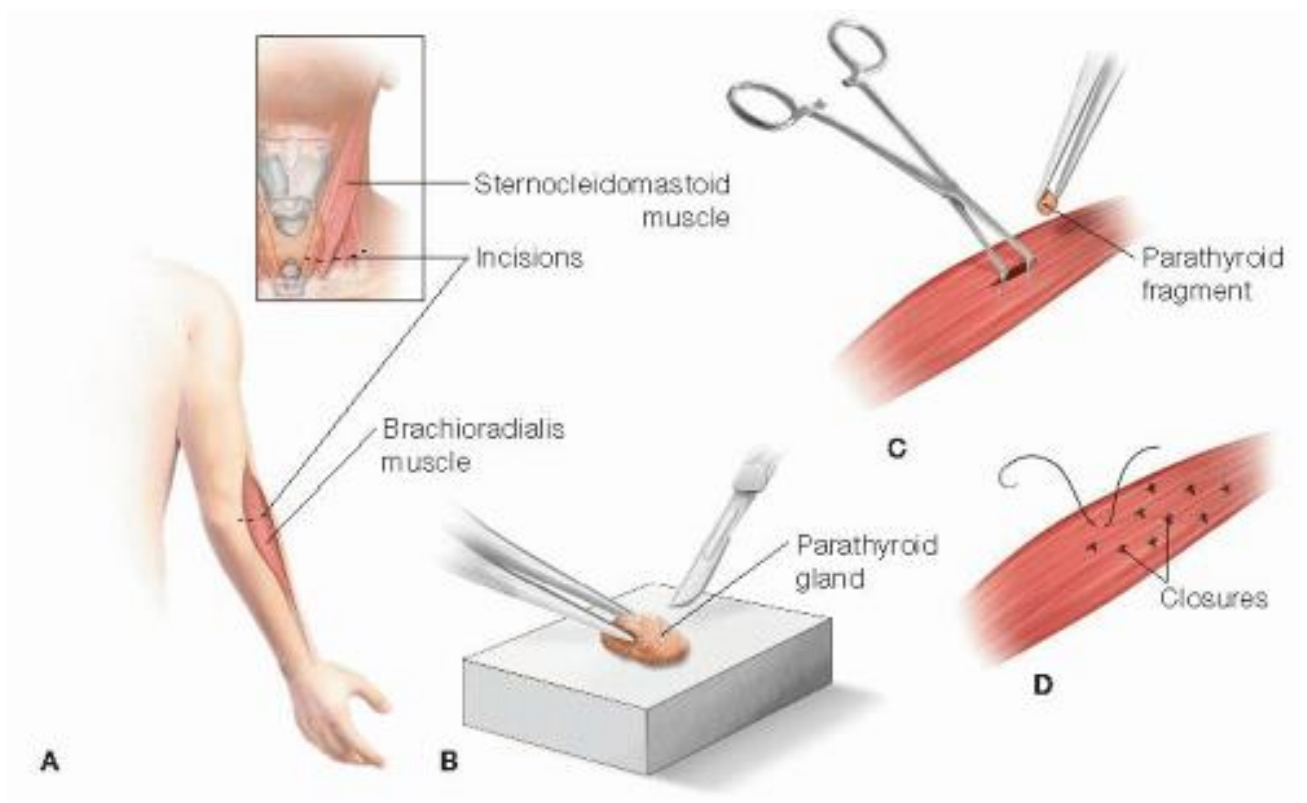
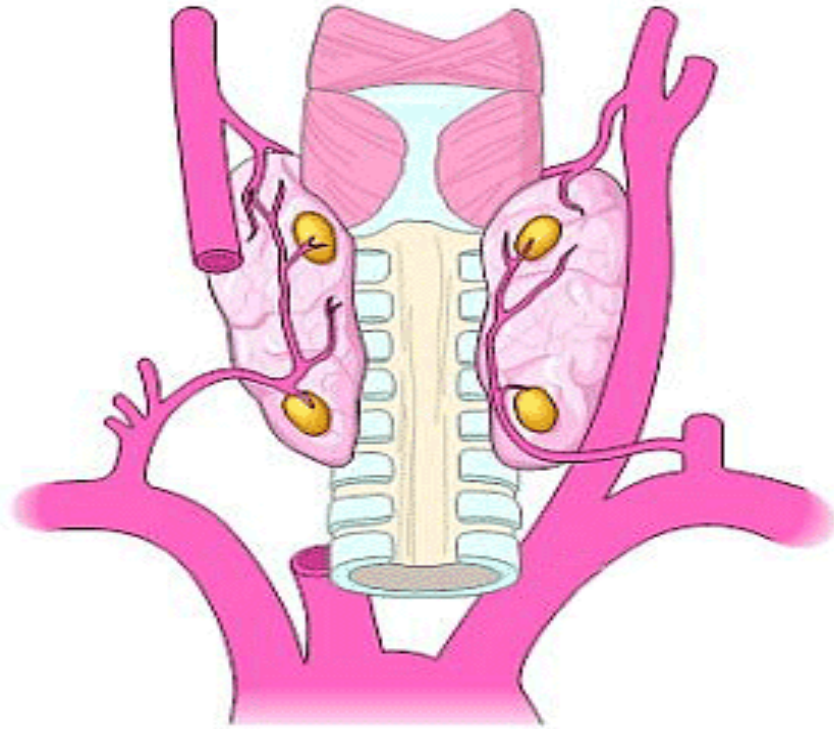
- It is the most popular operation for operable carcinoma of thyroid .
- To avoid recurrence , **many experienced surgeons** prefer total thyroidectomy for any diffuse thyroid disease ( colloid , SNG , 1ry & 2ry toxic goitre ) especially if there is marked pathology on the postero-medial part of each lobe .

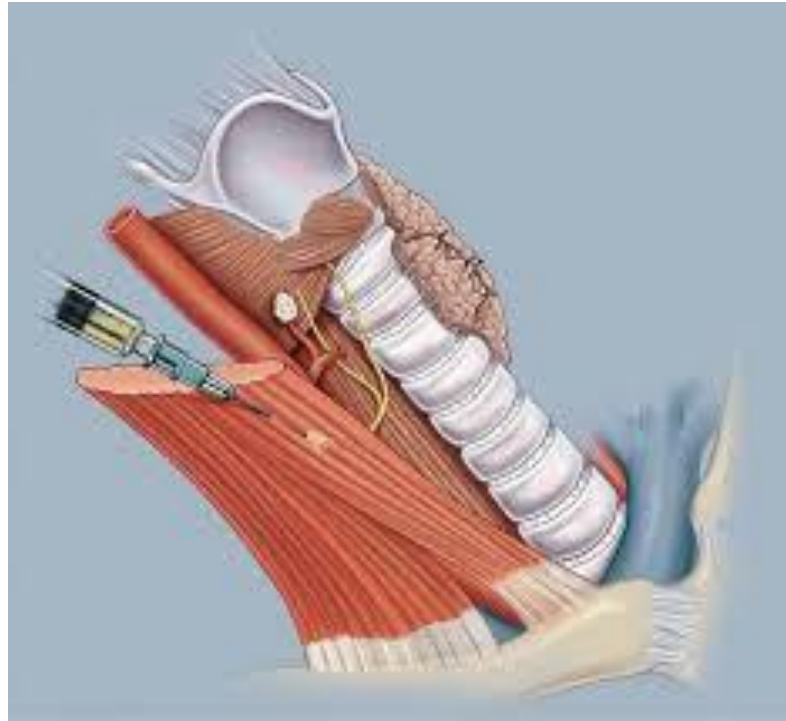
➤ **Complications :** It carries a risk of injury of parathyroids or recurrent laryngeal nerves .

➤ **Precautions :**

- Parathyroid glands ( with their blood supply ) and recurrent laryngeal nerves should be exposed and preserved in situ ( unless infiltrated ) .
- The inferior thyroid artery should be ligated not truncally, but peripherally on the capsule of the thyroid gland to preserve the vascular supply to the parathyroid glands.
- At least one parathyroid gland should be preserved .
- If parathyroid glands are subcapsular or devascularized , auto-graft ( after frozen section confirmation of parathyroid

gland ) into the contralateral sternomastoid or recently in the muscles of forearm .





★ **N.B : You can live with 1/2 parathyroid gland .**

### **5) Isthmusectomy :**

- **Indications :** Relief of tracheal compression and respiratory distress in Rediel's thyroiditis , lymphoma & anaplastic carcinoma .

★ **N.B : Subtotal lobectomy , total lobectomy and partial thyroidectomy are old terms not used nowadays and the least thyroid resection performed nowadays is hemithyroidectom .**

