

- thyroid veins were ligated. The transverse part of incision was deepened, dividing skin, platysma and strap muscles in the same line. The sternomastoids were retracted laterally and by blunt dissection inferior thyroid arteries were identified and ligated in continuity, away from recurrent laryngeal nerve on each side. Inferior thyroid veins were ligated. All was done without mobilizing the thyroid. Then thyroid lobes were mobilized. Any other vessel coming out of the gland was secured and ligated properly. The gland was separated from the trachea and removed in toto. About 10 gms of normal looking thyroid tissue from the lateral lobes was left on each side which protected the recurrent laryngeal nerves and at least one parathyroid gland. Some portion of the skin was excised, strap muscles were sutured after plication as describe by Olurin⁷. The anaesthetist was asked to remove the endotracheal tube while a tracheostomy was instituted at this stage. Anaesthesia for the wound closure was given through the tracheostomy tube. The wound was closed in layers after leaving two tube drains, one on each side, which were removed after 48 hours. Tracheostomy tube was removed after 5 days and sutures were removed after 7 days. Patient made an uneventful recovery and went home on ninth day after operation. The thyroid gland weighed 2500 gms and histological examination revealed simple nontoxic, benign multinodular goitre.
- ### Discussion
- Operation for a giant goitre poses a great problem to a surgeon in view of the great vascularity of the gland and its peculiar site and the danger of post operative respiratory obstruction. Thyroid gland receive blood supply from superior and inferior thyroid arteries but also from the laryngeal, tracheal, thyroid ima and so many other unknown arteries. Due to its high vascularity and pressure on the big veins, distended and tortuous thyroid and neck veins also pose a great problem. Initial bilateral ligation of the external carotid will control most of the blood supply of the thyroid except from inferior thyroid artery which is coming from the thyrocervical trunk of the subclavian artery. Middle thyroid veins and inferior thyroid arteries
- should also be ligated before mobilizing the gland. We got reasonably good bloodless field and patient needed only four units of blood even with a low haemoglobin. It took us three hours to finish the operation which included induction of anaesthesia. Post-operative respiratory obstruction is not an uncommon complication after removal of such huge goitres⁸, which may occur immediately or may take upto 5-12 hours. It may be due to reactionary haemorrhage, tracheomalacia, long kinked trachea, laryngeal oedema or rotated larynx. So a prophylactic tracheostomy for 4-5 days is a life saving procedure in these cases⁹.
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THYROIDECTOMY FOR A GIANT GOITRE

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Abstract

This is a report of a giant nontoxic, multinodular nonmalignant goitre who underwent subtotal thyroidectomy by us. It weighed 2.5 Kg after removal.

In view of the profuse vascularity of the thyroid we initially ligated the external carotid arteries on both sides. Prophylactic tracheostomy is mandatory after this operation for 4-5 days.

Key words: goitre, thyroidectomy, multimodular goitre and thyroid.

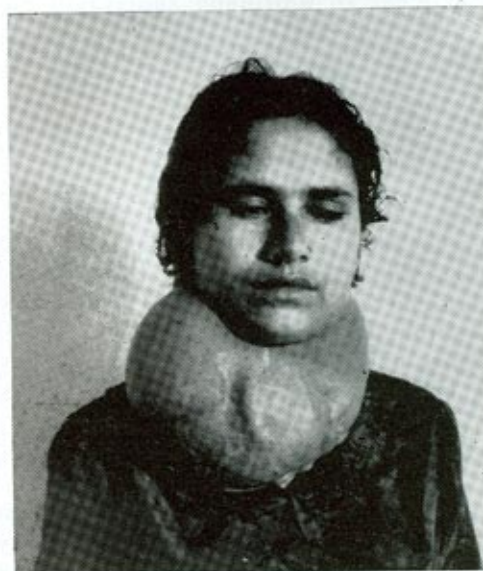
Introduction

Goitre is a health problem throughout the world¹. It is also a major problem in Pakistan specially in the Northern Mountainous areas where it is endemic². Sporadic goitres are not uncommon in Pakistan specially in the people living at river bank³. Simple goitre may attain a large size without giving any symptom. In the endemic areas it is usually considered to be a normal feature and patients do not present to the doctors unless they have some complication like respiratory obstruction, stridor, toxicity or malignancy. Rarely the goitre may attain a giant size without any complication. By virtue of its size, blood supply and site, the operation for this size of goitre poses a great challenge to a surgeon. We are presenting a giant sized goitre which we operated at B.V.V. Hospital Bahawalpur.

Case

A 20 years old married female presented with a huge nodular goitre growing slowly since her childhood. There was no dyspnea, dysphagia or any toxic symptom. She was getting some difficulty in breathing while lying in supine position. Her all vital signs were normal. The size of the goitre was 16x8x8 cms on the right and 18x10x9 cms on the left side, varicosities were distinctly visible. There was no murmur in the thyroid. X-rays chest, E.C.G., T₃, T₄ and blood sugar were normal. Her Hb was 9.2g/dl and X-ray neck did not show any compression or deviation of the trachea. Pre-operative direct laryngoscopy

revealed normal vocal cords. Four units of blood were arranged for the patient. Gentamycin 80mg 8 hourly was started in the morning of the operation as prophylaxis, which was continued for 5 days.



The patient with a huge goitre. Note prominent veins

Operation

An induction with thiopentone and suxamethonium was carried and a disposable cuffed portex endotracheal tube was introduced. The anaesthesia was maintained by nitrous oxide, oxygen and halothane. The patient was placed in a supine position with neck in hyperextended position and a sand bag behind shoulders. The table was given a 150° foot down tilt. A vertical incision was made starting 5 cms below angle of mandible on each side as advised by Manoppo⁴. The lower ends of both incisions were joined like a collar incision. External carotid artery on each side was reached by dissecting anterior to sternomastoid muscle and dividing the strap muscles. External carotid arteries were ligated in continuity just at their origin. Superior thyroid artery with its vein were also ligated. Then middle

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