Fibromatosis of Thyroid Gland- A Case Report

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Abstract

Fibromatosis covers a broad group of benign fibrous tissue proliferations of varied microscopic appearances that are intermediate in their biological behaviour between benign fibrous tumour and fibrosarcoma. Extra abdominal fibromatosis in the neck occasionally cause serious sequelae when aggressive invasion of vital structure occurs. However, the principle of wide excision is difficult to apply in some patients because of the important organs surrounding the tumour. We describe a primary spindle cell tumour of thyroid that raised initial diagnostic problems and was eventually diagnosed as fibromatosis of thyroid gland.

Keywords

Fibromatosis, Aggressive fibromatosis, Fibroma of thyroid, Carcinoma thyroid.

A 26 year old woman presented with a progressively increasing swelling of thyroid gland and change of voice for last three years. She preferred to sleep in lateral decubitus because of respiratory difficulties in the supine position. On examination, the swelling (12 cm X 12 cm) was firm to hard in consistency and not moving up with deglutition. No carotid pulsation was elicited. Provisional clinical diagnosis of carcinoma thyroid was made (Fig. 1).

Routine investigations and thyroid function tests were normal. FNAC reported as colloid goitre. I₁₃₁ thyroid scan showed small functional thyroid tissue in right Lobe. Radioactive Iodine uptake was 3% in 24 hours. X-ray neck showed a large soft tissue mass compressing and indenting the trachea. Indirect laryngoscopy revealed both vocal cords mobile and presence of laryngeal compression.

Preoperatively, fibre-optic bronchoscopy done under LA elicited supracarinal stenosis, dilated by bougies for successful endotracheal intubation. Total thyroidectomy technically was not possible as hard, nodular, fibrous mass was engulfing major vessels of neck and fixed to trachea. The mass in front of trachea was excised to relieve the tracheal compression.

Immediately after surgery, extubation failed because of respiratory distress. Patient was shifted to ICU for planned extubation, that was possible only after two weeks of respiratory support. The patient was discharged with tab. Prednisolone 10 mg twice daily

Fig. 1 : Patient's Profile.

Fig. 2 Cutsurface of the tumour-homogenous grey white.

Fig. 3 (Mag 5) : Mesenchymal tumour infiltrating the thyroid tissue.

with advice to attend surgical out-patient department. After surgery the specimen was sent for histopathological examination, cut surface of the tumour was homogenous, glistening, grey white and showed coarse trabeculations (Fig. 2)

Fig. 4 (Mag 40) : Tumour cells showing storiform pattern. No Mitoses seen.

Histology revealed benign mesenchymal tumour compatible with fibromatosis of thyroid gland. Thyroid tissue could be identified as infiltrated by the tumour (Fig-3 and Fig. - 4).

We report this case because of its rarity, peroperative difficulties and its clinical resemblance to carcinoma.

Aggressive fibromatosis of neck, a rare variety of extra-abdominal fibromatosis, was reported in Japan Journal of Surgery in 1990. The case was treated effectively by prednisolone and testolactone with long follow up study with good results.

Papillary carcinoma of thyroid with fibromatosis-like stroma has been reported in 1995². Histologically the tumour was composed predominantly of fibromatosis-like stroma in which small follicles of papillary carcinoma was diffusely dispersed.

Fibromatosis of thyroid gland was reportedly treated by near-total thyroidectomy with good results³, fibromatosis in this case predominantly affected the right lobe of thyroid and was limited to the thyroid gland.

References

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