Acute Airway Obstruction due to a Benign Thyroid Mass

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Clinical Image

A 51-year-old female complained of neck swelling and shortness of breath. Physical examination revealed a large left-sided, non-tender lobe of the thyroid, whose lower pole was not palpable, with a positive Pemberton’s sign.

She was biochemically euthyroid, but incidentally found to have hypercalcemia with an elevated parathyroid hormone (PTH) level. Computed tomography revealed a large mass (6.4 cm × 5.2 cm × 8.2 cm) occupying the left-lobe of the thyroid extending into the thoracic-inlet causing tracheal and esophageal compression and deviation (Figure 1, Panel A). Sestamibi scan revealed a large left thyroid lobe with homogenous uptake. No abnormal parathyroid lesion was localized (Figure 1, Panel B).

The patient underwent a left-sided lobectomy and removal of an enlarged parathyroid gland. The specimen comprised of the left-lobe of the thyroid measuring 7.0 cm × 8.5 cm × 5.0 cm (Panel C). A solid mass was seen occupying most of the thyroid lobe. Pathological analysis confirmed a benign follicular adenoma of the left lobe. Post-operative calcium and PTH levels normalized and all symptoms resolved. She remained euthyroid on follow-up.

Keywords: Thyroid mass; Benign tumor; Airway obstruction

Figure 1: (A) Computed tomography revealed a large mass occupying the left-lobe of the thyroid extending into the thoracic-inlet causing tracheal and esophageal compression and deviation; (B) Sestamibi scan revealed a large left thyroid lobe with homogenous uptake. No abnormal parathyroid lesion was localized; (C) The specimen comprised of the left-lobe of the thyroid measuring 7.0 cm × 8.5 cm × 5.0 cm.

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