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Cervico-mediastinal Thyroid Masses - Our Experience

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Abstract

Introduction: Over the last decades, several definitions and classifications of cervico-mediastinal goiters and thyroid masses have been proposed. We analyze and discuss the clinical presentation, the diagnostic procedures and the surgical technique in relation to post-operative complications and results in cervico-mediastinal thyroid masses admitted in our Clinic of Thoracic Surgery over a period of 22 years (1991-2012).

Methods: We reviewed 130 patients who underwent surgery for retrosternal thyroid masses, 77 (59.23%) women and 53 (40.77%) men. Mean age was of 53 years. Shortness of breath was observed in 71 (54.61%) patients as the most frequent preoperative symptom. Cervico-thoracic CT scan reveales the existence of a cervico-mediastinal mass and can appreciate the degree of intrathoracic progression, tracheal compression and dislocation, as well as the relations with other anatomical structures of the visceral mediastinum. All 130 patients were prepared for a thoracic approach, majority of the cases were operated by Prof. T. Horvat. The surgical procedure was performed by cervical approach only in most of the cases (106 cases) (Kocher type cervicotomy in 63 cases and Horvat type "en-Y" cervicotomy in 43 cases). We used a bi-polar approach for large cervico-thoracic masses: cervicotomy and partial upper sternotomy in 20 cases, cervicotomy and full sternotomy in 3 cases, cervicotomy and right axillary thoracotomy in one case.

Results: The removal of the thyroid mass and decompression of the trachea have been achieved in all cases. Postoperative results were very satisfactory, with absence of respiratory distress and with normal function of the vocal cords. No postoperative mortality was encountered.

Conclusion: The presence of a cervico-mediastinal thyroid mass with or without respiratory distress requires a surgical excision as the only treatment option. The surgical procedure represented a milestone for both anesthesiologist (difficult intubation in some cases of large goiters) and thoracic surgeon. Thyroid masses extending to the mediastinum can be excised successfully by cervical incision. Bipolar approach has an excellent outcome, achieving a safe resection, especially in large thyroid masses extending to the mediastinum with close relations to mediastinal structures.

Key words: cervico-mediastinal, intrathoracic thyroid mass, goiter, cervicotomy, cervicosternotomy, total thyroidectomy

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