ANTERIOR MEDIASTINAL MASS CASE SERIES

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Aim: To study the clinical features, different histology, treatment patterns and outcomes of anterior mediastinal masses in a developing thoracic oncology institute.

Methods: Retrospective analysis of thoracic surgery database maintained in the department of surgical oncology, BRA IRCH, AIIMS, New Delhi, India was analyzed from 2013 to 2014. Surgically explored anterior mediastinal mass patients were included in the study.

Results: A total of 11 cases were diagnosed to have anterior mediastinal mass contributing to 0.1% of all malignancies. Median age of presentation is 40 years (6 to 62 years) with a male predominance [M:F = 7:4]. Chief complaints were chest pain and cough. Computed tomography was done in all patients and pre operative biopsy / needle aspiration done for diagnosis in majority. Five patients were diagnosed to have thymoma with three myasthenia gravis features, two cases of germ cell tumor and poorly differentiated carcinoma and inflammatory myofibroblast tumor each. Four patients received neoadjuvant chemotherapy [two cases of germ cell tumor and two cases of locally advanced thymoma] and yielded a partial response. Median sternotomy done in 10 cases and R 0 resection achieved in 10 patients. Phrenic nerve, pericardium, pleura, lung, manubrium, superior vena cava and brachiocephalic vein were the surrounding structures involved. Histopathology showed majority to be thymoma [six patients; WHO AB-1, B1–2, B2–2, B3–1] followed by germ cell tumor – 3 patients [rare – seminoma in female], one each in adenomatous goiter of thyroid and inflammatory myofibroblast tumor. Six patients received adjuvant therapy and all myasthenia gravis patients showed symptomatic improvement.

Conclusions: Multimodality management with aggressive surgery results in better outcomes of anterior mediastinal mass.

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