Giant mediastinal germ cell tumour: an enigma of surgical consideration

Abstract

We present a case of 16-year-old male, who was referred from private centre for dyspnoea, fatigue, and orthopnea. The chest radiograph revealed complete opacification of left chest which was confirmed by computed tomography as a large left mediastinal mass measuring $14 \times 15 \times 18$ cm. The diagnostic needle core biopsy revealed mixed germ cell tumour with possible combination of embryonal carcinoma, yolk sac, and teratoma. After 4 cycles of neoadjuvant BEP regime, there was initial response of tumour markers but not tumour bulk. Instead of classic median sternotomy or clamshell incision, posterolateral approach with piecemeal manner was chosen. Histology confirmed mixed germ cell tumour with residual teratomatous component without yolk sac or embryonal carcinoma component. Weighing 3.5 kg, it is one of the largest mediastinal germ cell tumours ever reported. We describe this rare and gigantic intrathoracic tumour and discuss the spectrum of surgical approach and treatment of this exceptional tumour.