

AB019. Extended subxiphoid thymectomy for a large B3/B2 thymoma with positive acetylcholine receptor antibodies but without myasthenia

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Abstract: We present a 60-year-old gentleman whose large thymoma was discovered by computerized tomography (CT) during workup for facial nerve palsy after tooth extraction. Following successful treatment of the palsy with valaciclovir and prednisone, partial regression and necrosis of the tumor were apparent. CT-guided biopsy was not diagnostic and yielded connective tissue with scarce atypical cells. Positivity of beta-2-microglobulin (2.62 mg/L), bilateral distribution in anterior mediastinum and regression and necrosis after steroids suggested lymphoma; however, positivity of acetylcholine receptor antibodies (AChRABs 7.8 nmol/L) and radiological signs of resectability supported the diagnosis of thymoma, and led to further neurological evaluation (no clinical/EMG signs of myasthenia, MG) and subsequent extended thymectomy, performed via transverse subxiphoid incision with sternum elevation and one intercostal port in each pleural cavity. Elongated adhesions to middle and upper pulmonary lobes were divided with LigaSure, no signs of involvement of other neighboring structures were present. For extraction in a bag, linea

alba was cut to further separate abdominal rectus muscles and thus enlarge the access without opening peritoneum. Mediastinal lymphadenectomy was included. Postoperative course was uneventful with chest tubes removed by day 4 and discharge on day 6. Histology confirmed an R0 resected Masaoka IIB/TNM T1aN0M0 (macroscopic transcapsular invasion into fat) 12×7×3.5 cm mixed B3 thymoma with small areas of B2, no positive lymph-nodes, and 70% of its volume necrotic. The surgery as well as histological images are included in a video of this case report available here (<https://www.asvide.com/watch/33746>). Adjuvant radiotherapy (50 Gy) was administered without complications and follow-up was scheduled including evaluation of AChRABs. Regression, necrosis and inconclusive biopsy after steroid treatment can occur in lymphoma as well as thymoma or thymic hyperplasia. Presence of AChRABs in our patient and tumor's defined borders on CT supported the diagnosis of thymoma and an up-front resection. A minority of patients with thymoma without clinical MG present with positive AChRABs are at risk of developing MG postoperatively, therefore follow-up should include checking AChRABs. Subxiphoid approach allows for a minimally invasive extended procedure even in the presence of a large thymoma thanks to scalability of the subxiphoid incision without compromising the oncological principles.

Keywords: Thymoma; subxiphoid thymectomy; acetylcholine receptor antibodies; steroid treatment; subclinical myasthenia

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Footnote

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