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CLINICAL IMAGE

Acute improvement of myasthenia gravis after thymectomy

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Case

A 47-year-old male presented with progressive complaints of diplopia, ptosis, swallowing difficulties and general muscular weakness. Positive acetylcholine receptor antibodies and a positive neostigmine test confirmed the diagnosis of myasthenia gravis. Despite anticholinesterase therapy, the myasthenia gravis progressed over a period of two months. It is known that thymoma is present in 10-30% of the myasthenia gravis population. In the presented case, the chest X-ray showed a bulging tumour near the right hilum (*figure 1*). A chest computed tomography (CT) scan confirmed the presence of a demarcated mediastinal mass in the anterior mediastinum. Given the combination of clinical presentation and the findings on the chest CT scan, there was a high suspicion of thymoma. The patient was discussed in a multidisciplinary team and accepted for thymectomy. At surgery there was no involvement of cardiac or other tissue. Pathological investigation confirmed the diagnosis. On the day of surgery, oral anticholinesterase therapy was switched to continuous intravenous administration. Already in the intensive care unit, the patient experienced improvement in strength. The patient was discharged from hospital four days after surgery with stable medication-controlled myasthenia gravis. Two weeks after surgery the patient marked his progression as 'spectacular'. The strength in his arms, legs and neck had almost normalised and although to a lesser extent, only the diplopia was present.

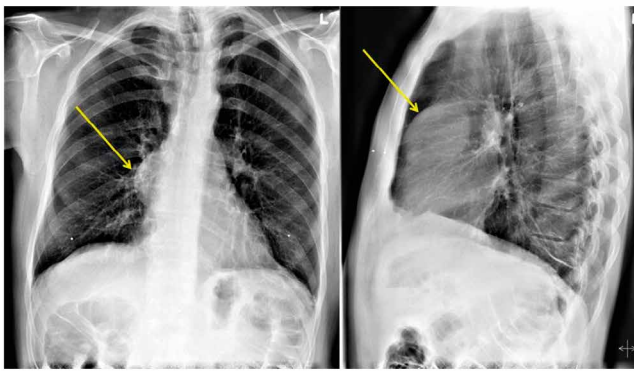

Figure 1. Chest X-ray shows a bulging mediastinal mass (arrows) at the right hilum adjacent to the right atrium in a patient with myasthenia gravis

Current guidelines and future perspectives

In line with current European and American guidelines, our case shows that thymectomy should always be considered in patients with myasthenia gravis and a thymoma, especially in medical therapy-resistant cases. Preoperative evaluation by a multidisciplinary team including a surgeon, anaesthesiologist and neurologist is essential to determine eligibility and timing for surgery. Preoperative CT scanning is the imaging modality of choice to distinguish thymoma from other anterior mediastinal tumours and for pre-surgical planning. Recent advances in minimal invasive surgical approaches have resulted in promising outcomes in terms of postoperative complications and hospital stay. However, future studies examining long-term outcomes of minimal invasive thymectomy are required to ensure its role in the treatment of thymoma in patients with myasthenia gravis.

Disclosures

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