AB007. A case of myasthenia gravis, pure red cell aplasia and thymoma, but not in the order you might expect

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Background: The chronology of thymoma and associated paraneoplastic syndromes can be complex and unpredictable, with previous non-malignant thymic histology not precluding thymoma developing later. We present a case that demonstrates a complex history of myasthenia gravis (MG), thymoma and pure red cell aplasia (PRCA).

Case Description: A 31-year-old female of Japanese descent presented with extraocular, bulbar and limb weakness 2 months post-partum, and was subsequently diagnosed with acetylcholine receptor antibody (AChR) positive MG. Following an initial response to prednisolone and pyridostigmine she underwent a thymectomy in Japan and was found to have a hyperplastic thymus. She subsequently improved but remained symptomatic, steroid dependent, and intermittently requiring intravenous immunoglobulin (IVIg). She was unable to tolerate azathioprine and was reluctant to try alternative steroid-sparing immunosuppression. Seven years post thymectomy, she experienced worsening symptoms requiring multiple admissions for supportive care, IVIg and plasma exchange. A CT thorax was performed which identified a thoracic inlet mass abutting the right brachiocephalic and left common carotid artery. A subsequent ultrasound guided biopsy confirmed a thymoma and this was resected. The histology was confirmed as B2, stage 2, R1. No adjuvant therapy was required. Following this, the patient's MG markedly improved though she remained mildly symptomatic and dependent on low dose prednisolone. Five years later, she became increasingly fatigued in the absence of evidence of worsening MG and was found to have a slowly progressive anaemia. This culminated in an admission with an Hb of 40 g/L, elevated reticulocytes, macrocytosis, but normal haematinics. A subsequent bone marrow biopsy confirmed the diagnosis of PRCA. She remains dependent on transfusions and is due to start immunosuppression with ciclosporin.

Conclusions: Thymoma can develop many years after a normal thymectomy for MG, with new paraneoplastic syndromes also developing later still. It is important to consider these possibilities if a patient's MG deteriorates or new symptoms develop.

Keywords: Myasthenia gravis (MG); pure red cell aplasia (PRCA); thymoma; paraneoplastic; case report

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at https://med.amegroups.com/article/view/10.21037/med-23-ab007/coif). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee(s) and with the Helsinki Declaration (as revised in 2013). Written informed consent was obtained from the patient for the publication of this case report. A copy of the written consent is available for review by the editorial office of this journal.

doi: 10.21037/med-23-ab007
Cite this abstract as: Ashraghi MR, Quirke M, Mihai R, Ajzensztejn D, Stuart R, McCole M, Fryearson L, Buckley C, Leite MI. AB007. A case of myasthenia gravis, pure red cell aplasia and thymoma, but not in the order you might expect. Mediastinum 2023;7:AB007.