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Dyspnoea and Dysphagia as Initial Manifestations of Myasthenia Gravis

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In a recent article, Mohamed *et al.*, reported the interesting case of a 70 years old female who experienced a first myasthenic crisis (MC) immediately after combined thyroidectomy and thymectomy as the initial manifestation of myasthenia gravis (MG) (Daud, A. M. *et al.*, 2019). MC manifested as acute respiratory insufficiency and dysphagia, requiring tracheostomy and nasogastric tube feeding over weeks (Daud, A. M. *et al.*, 2019). The study raises the following concerns.

Missing in this report are the exact titres and reference limits of acetyl-cholin-receptor antibodies (AchR-abds.), the amount of decrement upon lowfrequency repetitive nerve stimulation (RNS), and the amount of jitter and blockings that were recorded upon single-fibre electromyography (EMG). We should also know which nerves underwent RNS and in which muscle single-fibre EMG was recorded. Since Achrabds. may correlate with the severity of the clinical manifestations of MG, we should know the course of AchR-abds. during the four months of hospitalisation and in the first year after discharge.

Reduced sensation of the larynx and absence of the cough reflex are unusual manifestations of MG and suggest affection of the vagal nerve. Thus, we should know if the vagal nerve was irritated during thyroidectomy and if there were any indications for a vagal nerve lesion in other locations, such as digestive compromise, heart rhythm abnormalities, reduced peristaltics, or bronchial dilatation. It should be also excluded by MRI of the brain that there was affection of the brainstem by hypoxia or ischemia periprocedurally.

We do not agree with the notion that MG initially manifested after surgery (Daud, A. M. *et al.*, 2019). Since the patient had dysphagia and dyspnoea already 6 months prior to surgery, it cannot be excluded that these were already the initial manifestations of MG. If there was proof for absence of aspiration or pneumonia during the 6 months prior to surgery, these features rather suggest MG than infection.

A myasthenic crisis is characterised by mydriasis (Medizin-Wissen https://www.medizinwissen-online.de/index). This is why we should know if the patient presented with mydriasis in the first few days after surgery.

The combination of goiter, thymoma, and MG is not unusual and has been previously repeatedly reported (Stefănescu, C. *et al.*, 2012).

We should know why the patient was treated only with pyridostigmine during four months, and why no immunoglobulines or long-term immunosuppression with azathioprine of mycophenolate mofetil was added (Daud, A. M. *et al.*, 2019).

Thymectomy is recommended as a treatment of myasthenia gravis (McIntyre, K. *et al.*, 2006). Thus, we should know if the patient profited from thymectomy during long-term follow-up, particularly with regard to dyspnoea, dysphagia, AchR-abd, Titres and intensity of treatment.

Since thymoma is associated with autoimmune MG in one to two thirds of the cases (Szobor, A. *et al.*, 1990), we should know why work-up for myasthenia was not initiated pre-surgery. From surgery it is well known that it may worsen myasthenia or even trigger a MC.

In summary this interesting case may profit from providing more detailed results about the work-up for MG, from providing an MRI of the brain, from exclusion of vagal nerve compromise during surgery, from a more indepth discussion of how to treat MC, and from presenting long-term follow-up data.

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