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Letter to the Editor

Isolated Dysphagia: It could be the tip of the iceberg of a bigger problem

Dear editor in chief,

We would like with this letter to reinforce the idea that the assessment of a patient with dysphagia requires a high degree of suspicion regarding its origin, since in fact it can only represent the initial manifestation of a bigger problem.

A 70-year-old man, with smoking habits, but previously autonomous and without major health problems, was admitted to the emergency department due to acute respiratory distress after eating. He was stabilized and otorhinolaryngology observation was requested. Nasofibrolaryngoscopy was performed, which showed a foreign body occupying the entire glottic region (Fig. 1). Under visualization, the foreign body was removed using forceps from foreign bodies through the oral cavity. A clear reduction in mucosal sensitivity was observed, with no coughing or vomiting reflex during airway manipulation. After stabilization and a better exploration of the clinical history, it was possible to notice that there was a history of dysphagia with about one year of evolution, for solids, and loss of five pounds in three months, without any more associated symptoms. To investigate the cause of dysphagia, he was observed by neurology, with suspicion of Lambert Eaton Myasthenic Syndrome (LEMS), confirmed by the presence of antibodies against voltage-gated calcium channels and eletrophysiological tests. Computed Tomography in combination with Positron Emission Tomography Scanning revealed a nodule in the right upper lobe, and lung needle biopsy confirmed a small cell lung carcinoma.

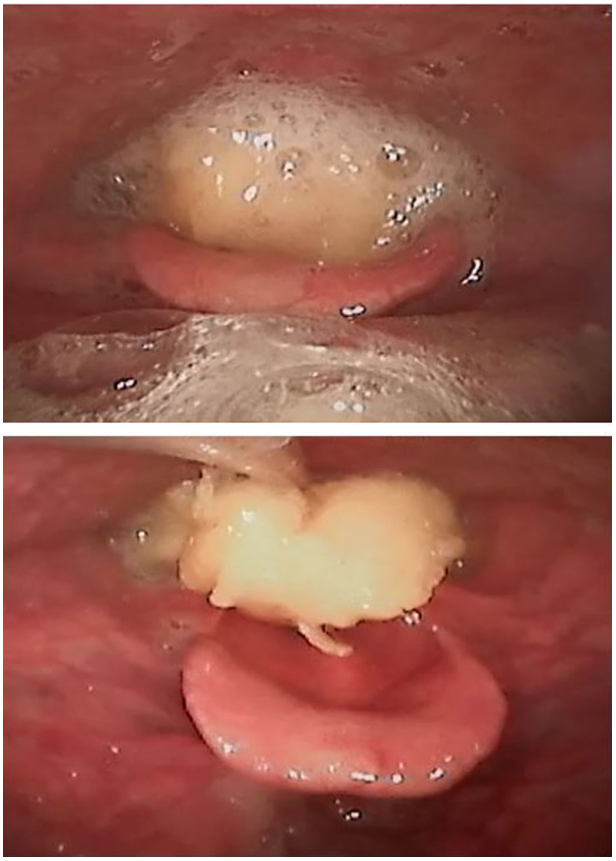

Fig. 1. Image captured by nasofibrolaryngoscopy. Foreign body observed in the glottic region of the larynx (orange), significantly compromising airway permeability.

The LEMS is an autoimmune-mediated (paraneoplastic or primary auto-immune) neuromuscular junction disorder, characterized by typical clinical triad: proximal muscle weakness, autonomic features, and areflexia [1]. Fig. 2 shows a schematic representation of the LEMS pathophysiology. In this work we report a rare and scarcely described presentation, an acute upper airway obstruction, as the tip of the iceberg for the diagnosis of LEMS.

In fact, symptoms of LEMS are usually slowly progressive, sometimes with years of evolution. Wirtz et al., in an analysis of 227 published cases, showed that the most frequent presentation symptoms are leg weakness (60%), generalized weakness (18%), muscle pain or stiffness (5%), dry mouth (5%), arm weakness (4%), diplopia (4%), and dysarthria (2%) [2]. Only in advanced stages of the disease there is an involvement of the oculobulbar muscles [2]. Particularly in relation to dysphagia, it can occur in 24–34% of patients with LEMS, although rarely occur during the initial manifestation of the disease [3].

With this case, we reinforce the idea already reported by Guruprakash et al. [4] and Payne et al. [5], who described two isolated cases of dysphagia, which later showed to be associated to LEMS. Therefore, isolated dysphagia, even with long duration (over 1 year), may be the initial manifestation of myasthenic syndromes, even when they have an associated tumor at their origin.

In conclusion, recognizing LEMS and others neuromuscular disorders swiftly is important, especially because the treatment entails addressing the underlying etiology. This particular case reinforces the few cases already described in the literature mentioned and emphasizes the importance of considering isolated dysphagia as a clinical presentation of LEMS and other myasthenic syndromes, requiring a high level of suspicion to be possible an early diagnosis and to be able to orchestrate a systematic and multidisciplinary approach.

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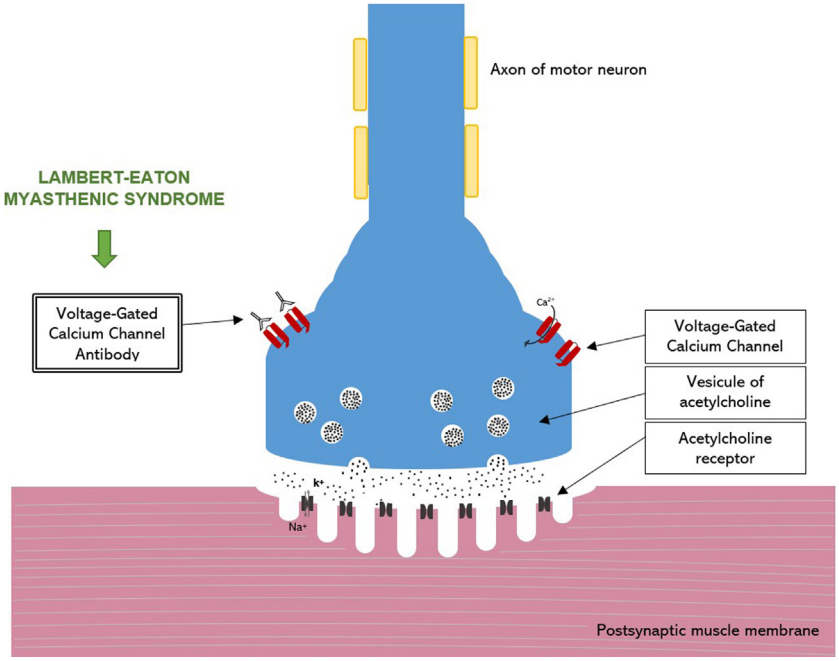

Fig. 2. Representative schema of the pathophysiology of LEM. Antibodies directed against the Voltage-Gated Calcium Channel, a large transmembrane protein with multiple subunits, play a central role in the pathophysiology of LEMS. These antibodies interfere with the normal calcium flux required for the release of acetylcholine. The alpha-1 subunit of the Voltage-Gated Calcium Channel contains a central calcium-conducting channel, a voltage sensor, and ligand binding sites. There are many subtypes of mammalian Voltage-Gated Calcium Channels, each characterized by the ligand binding characteristics of the alpha-1 subunit. Among these, the L-type, N-type, and P/Q-type VGCC are the most important. P/Q-type Voltage-Gated Calcium Channels probably represent the main immunologic target in LEMS.

Disclosure of interest

The authors declare that they have no competing interest.

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