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LETTER TO THE EDITOR

Laryngopharyngeal reflux and benign lesions of the vocal folds

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Dear Editor,

The impact of laryngopharyngeal reflux (LPR) in the development of benign lesions of the vocal folds (BLVF) is an important and debated topic of two disorders that concern a large number of patients consulting in voice centers. In their published study, Kibar et al. did not find significant upper esophageal sphincter (UES) alterations according to esophageal manometry in a cohort of patients with suspected LPR [1]. Authors consider that these findings cast doubt about the potential role of LPR in the development of BLVF.

The authors used reflux symptom index (RSI) and reflux finding score (RFS) to identify LPR in their patients (without indicative thresholds of LPR) and did not perform multichannel intraluminal impedance-pH monitoring (MII-pH). In the context of a research that aims to study the relationship between LPR and BLVF, this LPR diagnostic approach could be problematic for many reasons. First, symptoms described in RSI are non-specific and can be encountered in many upper aerodigestive tract conditions such as allergy that concerns a high number of patients [1, 2]. Thus, patients with BLVF themselves can have many pharyngolaryngeal symptoms described in RSI such as hoarseness, globus sensation, endolaryngeal mucus, and cough or throat clearing without having LPR [3]. Indeed, the dysphonia related to BLVF may lead to muscle tension dysphonia and the related development of laryngopharyngeal symptoms and signs [3]. Authors did not take into consideration allergy and muscle tension dysphonia that can be associated with similar LPR symptoms. Second, LPR signs exhibited in RFS are also non-specific and are found in more than 80% of healthy subjects [4]. Moreover, the RFS mean score of suspected LPR patients in the study of Kibar et al. is low and below the LPR thresholds defined by Belafsky et al. that could strengthen the hypothesis of another etiology of findings.

The use of MII-pH in place of esophageal manometry would make sense for two main reasons. First, as mentioned by authors, the results of esophageal manometry are normal in a large number of patients with confirmed LPR [5]. In fact, esophageal manometry is mostly performed in non-responder patients to treatment to identify some cofactors of resistance. Second, a hypothesis that might explain the occurrence of LPR without abnormality of UES is the indirect laryngopharyngeal irritation from vagally mediated reflexes, as the stimulation of gastroduodenal content into the low esophagus that may stimulate the mucosa chemoreceptors leads to laryngeal mucus secretion, cough, globus sensation, and throat clearing. This complex mechanism involves transient lower esophageal sphincter relaxation and esophageal mucosa irritation by gastric content that can be detected by MII-pH [1]. Kibar et al. excluded patients with hiatal hernia, although they can have normal UES pressure while being affected by this indirect mechanism.

The use of MII-pH is major for the LPR diagnosis at the time of the study, but does not guarantee the elaboration of a clear relationship between LPR and the BLVF development. Indeed, from a pathophysiological standpoint, 25–50% of patients with LPR have chronic course of the disease with periods of relapse and remission [6]. Precisely, the

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development of mucosal changes related to LPR (epithelial cell dehiscence, microtrauma, and inflammatory infiltrate) and the related modifications of the biomechanical properties of the vocal folds take time and patients could not have positive MII-pH results at the time of the diagnosis. In other words, LPR may precede the development of BLVF and is not necessarily present at the time of the BLVF diagnosis.

Based on all the findings mentioned above, the realization of well-structured controlled studies is crucial and should include patients with a clear diagnosis of LPR. The long-term follow-up of patients with both LPR chronic course and additional risk factors of BLVF development (such as professional voice users, etc.) makes particularly sense to identify an epidemiological association between both conditions.

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Compliance with ethical standards

Conflict of interest The author had no conflict of interest.

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