



Screening Evaluation for Laryngopharyngeal Reflux Disease

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Dear Editor,

We reviewed the article entitled: “*Screening Test for LPRD: History Versus Video Laryngoscopy*” by Mishra et al. [1]. The authors investigated the best screening test for laryngopharyngeal reflux (LPR) through a comparison between reflux symptom index (RSI) and reflux finding score (RFS). They did not find significant correlation between RSI and RFS and suggested that both have to be used to detect LPR. The question about the best screening test for LPR is important and we congratulate authors for this research. However, we wish to draw attention to many points.

First, LPR symptoms are not specific and RSI may be increased in patients with other laryngopharyngeal disorders, i.e. allergy, tobacco consumption, chronic rhinosinusitis or muscle tension dysphonia [2, 3]. In a context where hypopharyngeal impedance-pH monitoring was not used for the diagnosis, it is important to exclude all confounding factors to be sure that the included patients had

only LPR. Authors did not specify if they have excluded these differential diagnoses of LPR, leading to a potential inclusion bias.

Second, the non-specificity of symptoms involves the use of patient-reported outcome questionnaires that consider the most prevalent symptoms. RSI is well-used around the world but does not include some LPR prevalent symptoms, e.g. throat pain, odynophagia, halitosis or burp/regurgitations [4]. Moreover, RSI does not consider the symptom frequency because it focuses only on symptom severity, which may bias the assessment of the patient clinical picture. The lack of reliability of RSI was supported in a recent study where it was compared with reflux symptom score that considers both severity and frequency of the most prevalent LPR symptoms [4].

Third, similar comments may be done for RFS that does not consider many prevalent LPR extra-laryngeal signs, including coated tongue, oropharyngeal erythema or tongue tonsil hypertrophy [5]. Some of these findings are particularly prevalent in LPR patients such as anterior pillar erythema (91.0%), pharyngeal sticky mucus (82.8%) or tongue tonsil hypertrophy (73.7%; Fig. 1) [5]. Moreover, RFS was not assessed in a blind manner regarding the patient symptoms, leading to a potential bias because the sign evaluation may be influenced by the knowledge of symptoms [6]. We believe that the lack of significant correlation between symptoms and signs observed by Mishra et al. [1] may be explained by the risk of inclusion of patients with confounding factors and the use of clinical tools that do not consider all laryngeal and extra-laryngeal symptoms and findings.

Although some potential biases, authors suggested that LPR is more common in female and middle age groups. This finding is important and was not extensively investigated in the literature. Elderly patients could have less reflux symptoms regarding the aging of the mucosa and the

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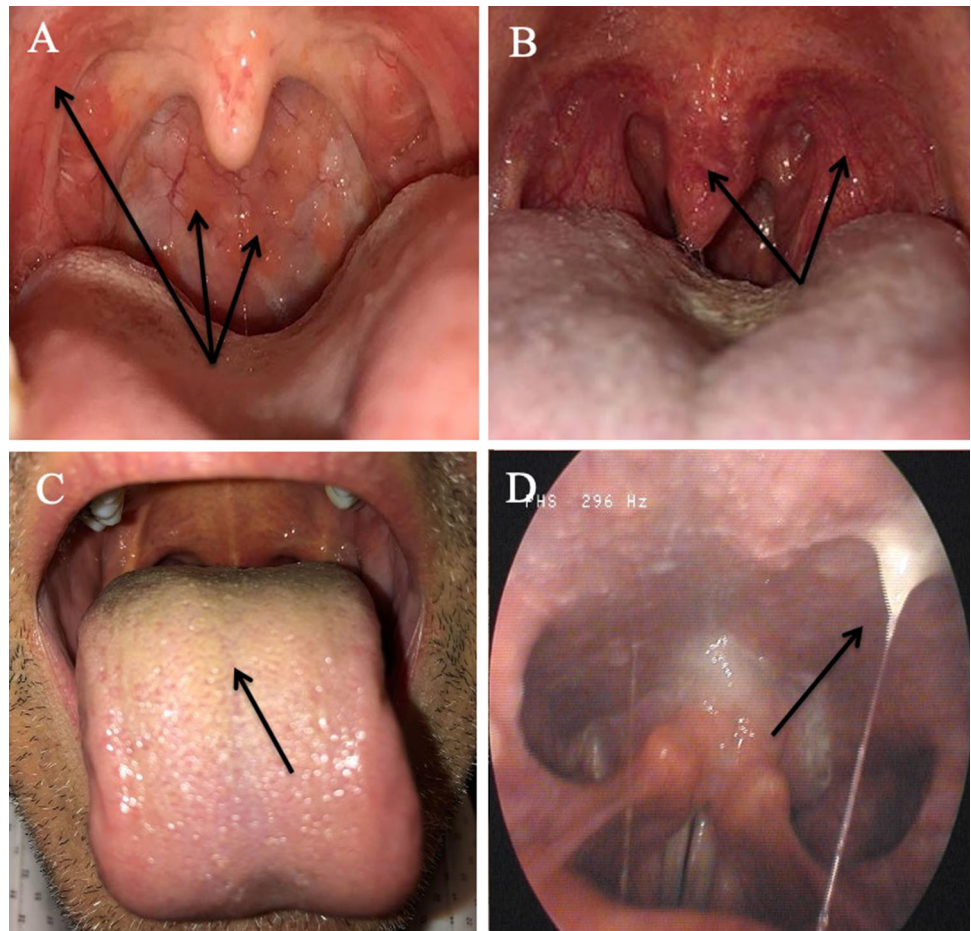
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Fig. 1 Common extra-laryngeal findings associated with reflux. Oropharyngeal posterior wall erythema (a), anterior pillar and uvula erythema (b), coated tongue (c) and pharyngeal sticky mucus (d)



related nerve endings. This hypothesis was already investigated in elderly patients with gastroesophageal reflux disease but few symptoms [7]. Future studies are needed to confirm this hypothesis.

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Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

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