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LETTER TO THE EDITOR

Xerostomia, sticky saliva and dysphonia

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Dear editor,

We read the scoping review of Ali Saghiri et al. dedicated to the relationship between xerostomia and voice quality [1]. The authors synthesized the current literature on how xerostomia correlates with voice quality and the mechanisms that may underlie potential association. They mainly found papers reporting association between xerostomia and radiotherapy, Sjögren's disease or other autoimmune diseases [1]. Only two papers reported mechanistic relationship and authors concluded that the literature is lacking about this prevalent condition in otolaryngology head and neck surgery. We congratulate the authors for the originality of this scoping review. In this letter, we would like to draw attention to a prevalent condition that was omitted by authors: laryngopharyngeal reflux (LPR).

Laryngopharyngeal reflux symptoms are prevalent in general population and outpatients consulting in otolaryngology, accounting for 10–30% of individuals [2–4]. Interestingly, the prevalence of LPR-related symptoms and findings may reach 50% of outpatients in laryngology office [5]. According to recent large-cohort studies, sticky saliva and throat dryness may reach 67% of LPR patients [6, 7] with higher prevalence in males compared to females [7]. From a pathophysiological standpoint, the dehydration of both saliva and laryngopharyngeal mucus is induced by pepsin, which downregulates mucin gene and carbonic anhydrase isoenzyme III expression [8–10] In clinical practice, LPR patients with high levels of pepsin in saliva or in nasal fluids may often present sticky saliva, throat or nasal secretions [11, 12]. The dehydration of mucus may contribute to the impairment of vocal fold biomechanical properties, which may be associated with abnormal voice quality measurements and dysphonia [9, 13]. Moreover, pepsin was correlated with effusion viscosity in pediatric otitis media [14], and more recently, pepsin was identified as contributing factor of dry eye [15].

In conclusion, we believe that the investigation of the relationship between xerostomia and voice disorders needs to consider the studies dedicated to LPR disease and pepsin, which were identified as potential etiological factor of sticky saliva, throat mucus, and dysphonia. We warmly encourage authors to continue research in this direction.

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