Laryngeal oedema – infections, allergy, laryngopharyngeal reflux (LPR)

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The **aim** of this poster is to share our clinical experience in 2016-2017 with cases of laryngeal oedema and dysphonia excluding benign tumours and malignancies.

Materials and methods: We have a number of 30 patients, both inpatients and outpatients, with a variety of laryngeal complaints such as hoarseness, cough, repetitive throat clearing and pharyngeal sensations of fullness, breathing difficulties. All of them had some type of laryngeal oedema of different degree. Among the used methods are full ENT examination, fibro- and videolaryngoscopy, fibrogastroduodenoscopy, skinprick tests.
We can divide our patients in three main groups: acute laryngitis, Reinke's oedema, laryngopharyngeal reflux

CASE 1
53-yo male with complaints of hoarseness, slight fever and discomfort for 3-4 days. Fibrolaryngoscopy shows oedematous and hyperemic true vocal folds with slight mucous lining, normal mobility (fig.1). Management: vocal rest, symptomatic treatement and antibiotics on account of concommitant infection of the mezopharynx as most acute laryngeal infections are viral and do not require antibacterial treatment. (1) Acute laryngitis has an abrupt onset and is usually self-limited. If a patient has symptoms of laryngitis for more than 3 weeks, the condition is classified as chronic laryngitis.

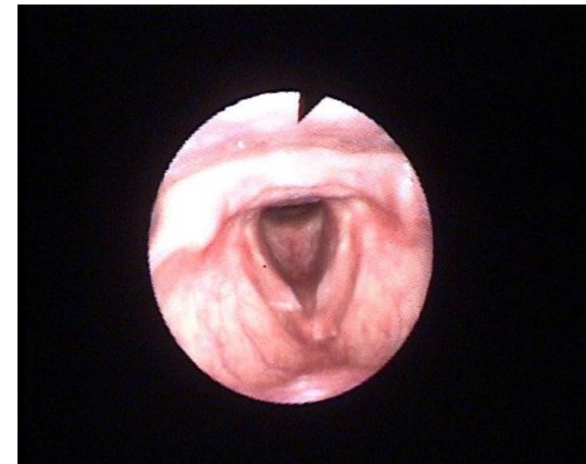

FIG.1 Case 1 Acute laryngitis

CASE 2 56 yo female with a history of dysphonia and slight shortness of breath for a few months. Smoker.
Fibrolaryngoscopy shows massive submucous odoema of the true vocal cords, „sac-like“ appearance of the latter, intact mobility. (Fig. 2) Diagnosed as Reinke's oedema Grade 2 according to Yonekawa Classification (2). Referred for surgery – microlaryngosurgery with good postoperative results a week (fig.3a) and a month post-op (fig.3b)

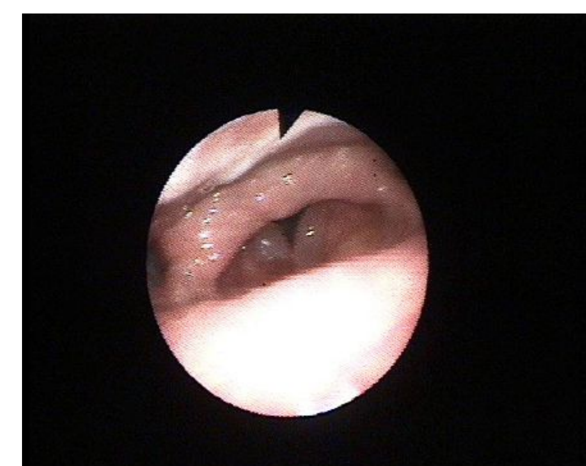

FIG. 2 Case 2 Reinke's Oedema

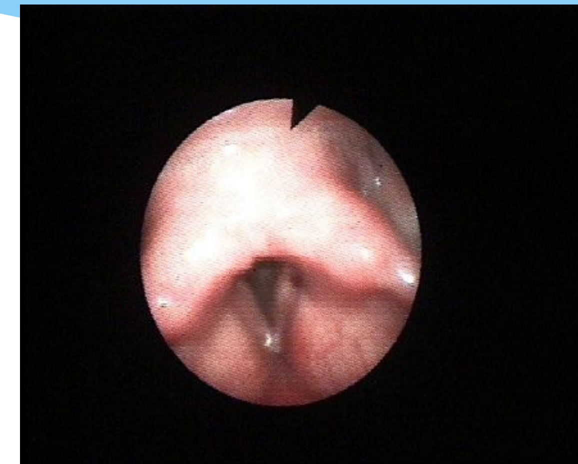

FIG. 3A Case 2 Ten Days Follow-up

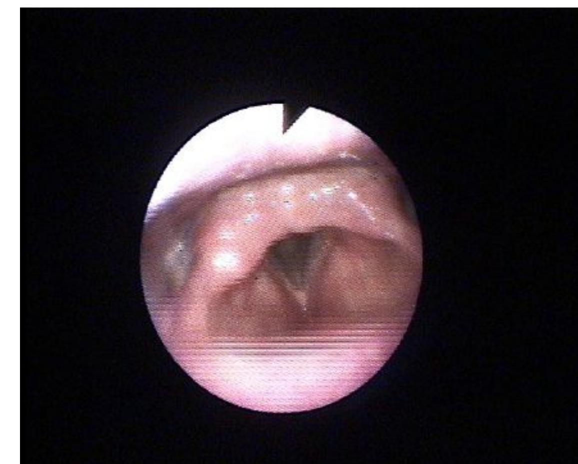

FIG.3B Case 2 One Month Follow-up

CASE 3 69 yo female presenting with complaints of slight dysphonia, repetitive throat clearing and foreign body sensation. Fibroscopy reveals interarythenoid oedema and hyperemia typical of laryngopharyngeal reflux (LPR) (fig.4a). Managed with pantoprazole p.o. with good clinical and subjective outcome (fig.4b). Referred to a gastroenterologist and fibrogastroscopy.

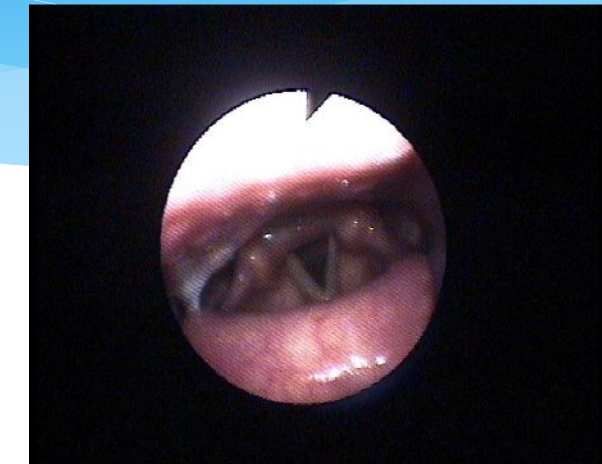

FIG.4A Case 3 LPR

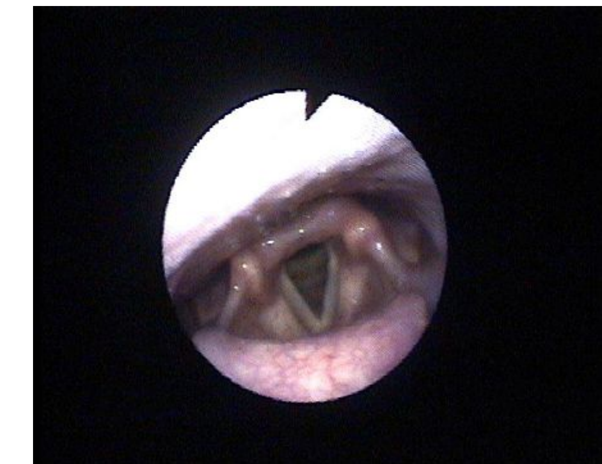

FIG4B Case 3 LPR 3 weeks on pantoprazole

Discussion: Similar laryngeal complaints may stem from a variety of clinical causes and require different therapeutic management. The main causes (besides benign tumours and malignancies) are infections, allergic reactions, smoking, and last but not least laryngopharyngeal reflux. Most infections of the larynx are self-limiting viral diseases; allergic oededmas require anthihistamine, intravenous corticosteroids and traecheostomy in severe cases; laryngopharyngeal reflux may need up to three months of PPI; some specifc cases of Reinke's oedema may benefit well from microlaryngeal surgery. Precise diagnosis is required with multidisciplinary approach in close collaboration with gastroenterologists, allergologists and, in some cases, intensive care specialists.

1. Reveiz L, Cardona AF. Antibiotics for acute laryngitis in adults. *Cochrane Database Syst Rev.* 2015
2. Zeitels, Steven (2002). "Management of common voice problems: Committee report". *Otolaryngology - Head and Neck Surgery*. **126**: 333–348.

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