PATCHY VOICE BOX

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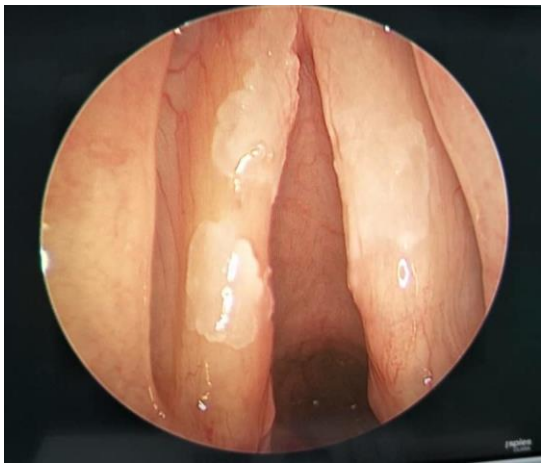
A 68-year-old gentleman with an underlying chronic obstructive pulmonary disease on a steroid inhaler presented a one-month dysphonia history. Apart from that, there was no dysphagia, odynophagia, neck swelling, or constitutional symptoms. Additionally, there was no choking, effortful speech or shortness of breath. On examination, the patient appeared comfortable under room air. Endoscopic laryngeal examination revealed a whitish patch over the bilateral vocal cord with intact mobility (Fig.1). Neck examination was unremarkable.



What is the most likely diagnosis?

A. Laryngeal candidiasis

B. Squamous cell carcinoma

C. Chronic laryngitis

D. Laryngeal tuberculosis

Answer: Laryngeal candidiasis

Direct laryngoscopy and biopsy of the whitish lesion performed under general anaesthesia revealed laryngeal thrush or candidiasis. Laryngeal thrush was identified to be secondary to a steroid inhaler. The patient was prescribed daily oral fluconazole for two weeks, and the steroid inhaler was withheld. At one month of follow-up, hoarseness and vocal cord lesion improved.

Squamous cell carcinoma classically presents with a fungating mass over the glottic region, whereas chronic laryngitis results in inflammatory changes in the overall supraglottic structures. On the contrary, laryngeal tuberculosis traditionally presents with an ulcerative lesion prominently over the interarytenoid region, arytenoid cartilages, posterior surface of true cords and laryngeal surface of epiglottis, along with systemic manifestation such as loss of weight. loss of appetite and night sweats.

'Thrush' denotes candidiasis or fungal infection involving mucous membrane. Common site of occurrence includes oral, esophageal as well as vaginal following altered immunity. Isolated laryngeal thrush presenting with dysphonia is rare and is oftentimes a subject of diagnostic dilemma. Meticulous history taking is crucial in this case as usage of steroid inhalers has been reported to be a culprit behind oro-laryngeal candidiasis.

Although *Candida* is a part of the normal flora of or-laryngopharyngeal mucosa, altered immunity may result in superficial mucosal infection, notably upon chronic usage of both systemic and topical steroids, overzealous antibiotic usage, presence of neutropenia as well as diabetes mellitus. Other predisposing factors include radiotherapy, tissue trauma, reflux, and immune deficiency, mainly acquired immune deficiency syndrome. In the same vein,

previously reported patients with isolated laryngeal thrush presented with dysphonia, cough, and signs of laryngeal irritation [1,2].

The effectiveness of fluconazole in treating laryngeal thrush has been lauded following the promising disease clearance. Additionally, it is crucial to address the main factor causing this entity by lowering the dosage and duration of steroid inhalers, utilization of spacer, or rinsing following spray [3].

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