Introduction: Laryngeal candidiasis is a rare condition. It is associated with certain risk factors, including immunosuppression, diabetes, and respiratory distress. Diagnosis is usually clinical, with biopsy considered when necessary. Treatment with antifungal medications is effective.

Methods: A retrospective chart review was performed of all cases of laryngeal candidiasis from 1995–2005 seen at the Pacific Voice Center, University of British Columbia, Vancouver, Canada. A total of 54 patients were identified and their charts were reviewed. All patients were assessed and managed by a single otolaryngologist (MDM). Demographic information was collected including gender and age at time of presentation. Additional information was reviewed: smoking history, medical history (asthma, COPD, GERD, and diabetes), and medication use.

Results: A total of 54 patients were identified with 44 males and 10 females. The average age of time of presentation was 52 years, range 15–82 years. Diabetes was documented in 3 patients (6%), asthma in 34 patients (63%), and 5 patients (9%) had a history of COPD. Twenty-six patients (48%) were asthmatics followed by a respiratoryist. Gastronomical reflux disease (GERD) was present in 42 patients (78%). The most common presenting symptom was dysphonia, observed in 37 patients (69%) of 54 patients. Other documented symptoms included: chronic cough (12 patients [22%]), sore throat (7 patients [13%]), shortness of breath (4 patients [11%]), globus sensation (3 patients [5%]), postnasal drip (2 patients [4%]), and hemoptysis (1 patient [2%]).

Discussion: We have presented the largest consecutive case series published in the literature to date on laryngeal candidiasis. Prior to this, the largest reported case series was in 1997, published by Tashjian and Peacock, Jr. Our results confirmed previous findings. The most common presenting symptom associated with laryngeal candidiasis was dysphonia (69%). Other common presenting symptoms included: cough, shortness of breath, throat irritation, globus sensation, and hoarseness. Interestingly, there was significantly greater proportion of females (81%) than males (19%) diagnosed with laryngeal candidiasis, an approximate ratio of 1:2 (female: male). There was no causation identified to explain this phenomenon. Sulica also found a female predominance in his study of 64 patients.

Conclusion: Laryngeal candidiasis is a rare and important condition. Diagnosis is usually clinical, with biopsy reserved for refractory cases. The majority of our patients had a diagnosis of asthma. Many asthmatics were being followed by a respirologist. We believe that close cooperation between otolaryngologists and respirologists is essential in diagnosis and treatment of laryngeal candidiasis.

References:

8. Fluconazole is highly effective at eradicating candida and thus far no resistance is known to the drug. Other antifungal medications are also available, but intravenously makes it use in an outpatient setting impractical. It may be considered useful in inpatient populations. This drug is effective against C. albicans, C. glabrata, C. famata and C. tropicalis are found in oral candidal infections but rarely do they involve the larynx. C. albicans is a ubiquitous organism found in the normal flora of humans and can be cultured in 7% of normal individuals.
9. Children and infants are more likely to present with respiratory distress as a result of smaller airways and reserve. In children, laryngeal candida is more likely to cause respiratory distress rather than throat irritation caused by patients.
10. The majority of our patients had a diagnosis of asthma. Many asthmatics were being followed by a respirologist. We believe that close cooperation between otolaryngologists and respirologists is essential in diagnosis and treatment of laryngeal candidiasis.

Laryngeal Candidiasis: A 10 Year Retrospective Review
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Abstract

Laryngeal candidiasis is a rare condition. Despite medical treatment, both of these patients were successfully treated with a second oral antifungal medication. All patients were treated with an oral antifungal medication. Patients were treated with one or a combination of the following medications: voriconazole, itraconazole, fluconazole, and posaconazole. Of these patients, 36% (52/148) were successfully treated with the first oral antifungal agent. Two patients (4%) showed persistent infection despite medical treatment. Both of these patients were successfully treated with a second oral antifungal medication.