Atypical case of fungal laryngitis

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INTRODUCTION

Fungal laryngitis is rarely seen in the immunocompetent patient. In recent years, mild cases have been associated with the use of inhaled steroids for obstructive pulmonary disease (1,2). Patients most commonly present with hoarseness and, rarely, respiratory distress (2) or odynophagia. Physical examination findings are often non-specific and can include inflammation of the larynx and leukoplaikia of the vocal folds (1-3). The most commonly isolated organisms are of the Candida species. Rarely do organisms from the Blastomyces, Histoplasma, or Coccioidiodes species cause symptomatic infection (1). We present an atypical case of laryngeal blastomycosis causing odynophagia and respiratory distress in an immunocompetent patient with no history of inhaled steroid use.

CASE REPORT

A 73 year old female presented to the Vanderbilt Voice Center with a seven month history of hoarseness and odynophagia that began two weeks following intubation for a bladder procedure. The patient had no improvement in symptoms with antibiotics prescribed by her PCP, but did note improved odynophagia with oral steroid therapy.

Of note, the patient had a 35 pack-year smoking history, but quit using tobacco seven years ago, and only used alcohol socially. She and her husband live on a farm and raise quail.

On examination, the patient had a rough voice quality. No significant lesions of the ears, nose, or throat were appreciated. Respirations were unlabored. Indirect laryngoscopy and videostroboscopy (LVS) revealed an exophytic mass involving the interarytenoid area and bilateral posterior vocal folds. Significant inflammation and erythema were also noted (Figure 1).

Due to the marked inflammation of the larynx and a question of possible chondritis, the patient was prescribed oral levofloxacin with follow-up scheduled for 2 weeks. No additional steroid therapy was initiated. She returned urgently 8 days later with increased odynophagia and “noisy” breathing, but denied respiratory distress.

On examination, she had obvious inspiratory stridor. LVS revealed interval worsening of the posterior glottic mass with infraglottic extension. Her airway was significantly narrowed (Figure 2).

The patient was admitted, and IV ciprofloxacin and steroids were initiated. CBC revealed a mildly-elevated WBC of 11.7 and C-reactive protein level was elevated at 81. All other serology, including electrolytes and autoimmune screening, was normal. CT scan of the neck and chest were performed, revealing an 11 mm postcricoid hypodensity, multiple sub-centimeter pulmonary nodules throughout both lung fields, and three cavitary left upper lobe lesions (Figure 3).

The patient was started on oral fluconazole 400 mg daily per infectious disease consult team. She noted improvement of her hoarseness and odynophagia within one week of treatment. LVS at one week revealed almost complete resolution of the inflammatory masses (Figure 5). The patient completed 6 months of therapy with fluconazole and continues to have complete resolution of her symptoms (Figure 6).

CONCLUSIONS

Fungal laryngitis has become a more frequent diagnosis in the immunocompetent patient due to the increased use of inhaled steroids for obstructive pulmonary disease. We present a rare case of laryngeal blastomycosis in a patient without this risk factor. When appropriate treatments for inflammatory processes are not successful or routine biopsy results do not reveal malignancy, the otolaryngologist must be mindful of the possibility of fungal laryngitis and diligent to investigate for its presence.

REFERENCES