Background

Sarcoidosis is a multi-system disease characterized by noncaseating epithelioid granulomatous inflammation.

Oropharyngeal stenosis is a rare entity that is hardly mentioned in textbooks today. Prior to 1940 before the advent of antibiotics, the majority of pharyngeal stenosis was due to syphilis. Although exceedingly uncommon, the majority of cases today occur in pediatric patients after adenotonsillectomies. However, a literature search failed to reveal any reports of oropharyngeal stenosis occurring secondary to sarcoidosis.

Case

A 55 year-old Haitian female with a past medical history of only hypertension presented with 6 months of progressive voice weakness and dysphagia. More recently, she has only been able to swallow a puree diet. Two weeks prior to presentation, she began to have noisy breathing in the setting of an upper respiratory infection. She has never been intubated nor had surgery. She has never had blisters on her skin, mouth, or genital area.

Physical Exam

• General: Obese woman with mild inspiratory stridor and mild increase in work of breathing
• 1.2cm erythematous, nontender left upper lip lesion
• There was mucosa that connected the anterior pillars, base of tongue and the soft palate, leaving a narrow, circular 1cm oropharyngeal aperture
• The soft palate seemed to be scarred down to the epiglottis with hypertrophy of the aryepiglottic folds, but there remained a patent airway. Vocal cord mobility was normal.

Laryngoscopy

Discussion

Oropharyngeal stenosis is a rare entity that mostly occurs today as a result of adenotonsillectomies. It has also been reported to occur secondary to rhinoscleroma, lupus, diphtheria, tuberculosis, caustic acid burns, scarlet fever, and Behcet’s disease, but there have been no reports that it has occurred secondary to sarcoidosis. It is necessary in our patient to consider tuberculosis, neoplasm, or other inflammatory processes such as Wegener’s Granulomatosis. In this case, the patient’s chronic cough, CT findings of hilar and mediastinal lymphadenopathy, multiple pulmonary nodules, and a biopsy showing granulomatous inflammation without necrosis is consistent with sarcoidosis.

In distal airways, it has been shown that sarcoidosis causes airway inflammation setting off a cascade of mucosal edema, erythema, and granuloma formation. As the inflammation progresses, the tissue begins to undergo fibrosis which eventually narrows the lumen. It is plausible that this same mechanism is what caused the stenosis of the oropharynx in our patient.

Follow-up and Conclusions

• The patient was admitted for airway observation. Administration of IV dexamethasone was followed by rapid symptom improvement, although her exam remained unchanged. She has been noncompliant with follow-up to the Otolaryngology clinic for further exams, but phone calls 2 years later reveal that she still remains asymptomatic.

• Oropharyngeal stenosis is a rare entity with most cases occurring secondary to traumatic adenotonsillectomies in children

• No literature found showing that oropharyngeal stenosis can occur secondary to sarcoidosis

• Hypothesis is that chronic granulomatous inflammation of the oropharynx from sarcoidosis causes progressive scarring and fibrosis, narrowing the oropharyngeal aperture

• Treatment is with steroids which is the standard of care for sarcoidosis

References