Rhinoscleroma of the Larynx

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ABSTRACT

Rhinoscleroma is a chronic granulomatous infection of the upper airway caused by Klebsiella rhinoscleromatis. It can affect any site within the respiratory tract from the nose to the tracheobronchial tree. Klebsiella rhinoscleromatis is endemic to regions of Africa, Southeast Asia, Mexico and Central and South America; laryngeal involvement is relatively rare, particularly in North America. 1 Rhinoscleroma was first described in 1870 by Ferdinand Von Hebra. Patients are often presented with hoarseness or dyspnea in the office and was noted to have restricted true vocal cord mobility with granular lesions along his false vocal cords and a small lesion along the anterior subglottis. The patient was readmitted to the hospital and underwent an awake tracheotomy and direct laryngoscopy, bronchoscopy and biopsy. Intraoperative findings included significant supraglottic edema and hyperemia. Repeat biopsies demonstrated squamous mucosa showing chronic submucosal inflammation and scarring but did not demonstrate typical pathological findings of Mikiulicz. He was treated with a six month course of Levaquin 750mg daily and Doxycline 100mg BID. He is being followed in the ENT clinic and is symptomatically improved. He phoned well with occlusion of his tracheotomy tube. Last flexible fiberoptic laryngoscopy demonstrated an adequate supraglottic and glottic airway with improved true vocal cord mobility however his subglottis still appeared narrowed anteriorly. He is scheduled for repeat direct laryngoscopy and bronchoscopy when his antibiotic therapy is completed in preparation for possible capping trials.

RESULTS

The patient was treated with 8 weeks of Levaquin with initial improvement in his symptoms. However, approximately ten months later he began to complain of worsening hoarseness, dyspnea and stridor. He underwent repeat flexible fiberoptic laryngoscopy in the office and was noted to have restricted true vocal cord mobility with granular lesions along his false vocal cords and a small lesion along the anterior subglottis. He was readmitted to the hospital and underwent an awake tracheotomy and direct laryngoscopy, bronchoscopy and biopsy. Intraoperative findings included significant supraglottic edema and hyperemia. Repeat biopsies demonstrated squamous mucosa showing chronic submucosal inflammation and scarring but did not demonstrate typical pathological findings of Mikiulicz. He was treated with a six month course of Levaquin 750mg daily and Doxycline 100mg BID. He is being followed in the ENT clinic and is symptomatically improved. He phoned well with occlusion of his tracheotomy tube. Last flexible fiberoptic laryngoscopy demonstrated an adequate supraglottic and glottic airway with improved true vocal cord mobility however his subglottis still appeared narrowed anteriorly. He is scheduled for repeat direct laryngoscopy and bronchoscopy when his antibiotic therapy is completed in preparation for possible capping trials.

DISCUSSION

Rhinoscleroma is a slowly progressive disease characterized by periods of remission and relapse as was the case in our patient. Rhinoscleroma of the larynx is uncommon and usually occurs in conjunction with intranasal disease. 2 Our case is unique in that intranasal biopsies and cultures were negative for Rhinoscleroma, suggesting this is primary scleroma of the larynx.

With the recent influx of immigrants from endemic areas, rhinoscleroma is encountered with increasing frequency and is important to include in the differential diagnosis of any patient with dysphonia and granulomatous lesions of the larynx. 4, 5

REFERENCES