**Extranodal NK/T cell lymphoma of the trachea causing airway compromise**

**Type:**

Case Report

**Author:**

Shine Kochukunju Raju University Hospitals, CWRU, Cleveland, OH

**Case Report:**

Extranodal NK/T-cell lymphoma, also known as angiocentric T-cell lymphoma is a rarity. It affects the upper aero-digestive tract and presents as a midline tumor. The nasal cavity and supraglottic space can be involved. We describe a case where the there was extensive involvement of the subglottic space and proximal trachea leading to airway stenosis and compromise.

**Description:**

A 22-year old female from Palestine, presented with a 2-week duration of cough, rhinitis and progressive dyspnea. She was on a 6-week visit to the United States. She denied fevers but complained of night sweats. On examination, she was dyspneic with a respiratory rate of 28 breaths per minute and an audible stridor. An emergency bronchoscopy was performed which showed extensive inflammation and narrowing of the larynx and subglottic space with mucosal necrosis and exposure of the tracheal cartilage. She was intubated with a 6.0 endotracheal tube. Biopsies of the laryngeal mucosa showed an abnormal T-cell population positive for CD3 and CD2, partly angioinvasive, with necrotic foci, consistent with extranodal NK/T-celllymphoma, nasal type. A tracheostomy was later done and she was treated with 4 cycles of dexamethsone, methotrexate, ifosfamide, L-asparaginase and etoposide (SMILE) and radiotherapy with good response.

**Discussion:**

Extranodal natural killer (NK)/T-cell lymphoma is a rare but distinct entity. It most commonly involves the midline such as the nasal cavity, sinuses and the supraglottic space. Laryngeal and tracheal involvement has been rarely reported. It shows a predilection for Asian and South American populations and occur mostly in adult males. Patients usually present with nasal obstruction or epistaxis due to a mass lesion, or extensive mid-facial destruction. It can also cause visual disturbances, dysphonia and respiratory distress needing an emergent airway as in our case. Ebstein-Barr virus infection is implicated as an etiology. Histopathology shows angiocentric and angiodestructive growth and neoplastic cells express cytoplasmic CD3 and CD56. The SMILE regimen has shown promise in some trials.