Pleomorphic Adenoma Presented as a Subglotic Mass.

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Received for Publication: April 5, 2006, Accepted for Publication: August 25, 2006.

Abstract:

Herein we describe a rare case of pleomorphic adenoma (benign mixed tumor) of subglottic area that presented with dyspnea and upper airway obstruction.

A 20 year old man was referred to our center with dyspnea and respiratory distress. Tracheostomy performed due to respiratory failure and subglotic stenosis, and then the mass resected by CO2 Laser. The specimens of the mass revealed distinctive features of pleomorphic adenoma.

Based on our previous knowledge, this neoplasm had not been reported in this region.

Key Words: pleomorphic adenoma, benign mixed tumor, subglotic stenosis, subglotic mass, minor salivary gland.
Introduction:
pleomorphic adenomas are the most common tumor of the salivary gland, (1,2,3) utmost originate in the parotid gland (3).
Approximately 85 % of all pleomorphic adenomas are located in the parotid glands, 10 % in the minor salivary glands, and 5 % in the submandibular glands (2). When they originate in the minor salivary glands, they occur mostly in the hard palate and soft palate. The second most common site of origin is the upper lip. (3)
This tumor is reported in other sites such as lacrimal glands, parapharyngeal spaces and even in paranasal sinuses and nasal septum, in different literatures (4,5,6), but is not reported in subglottic area so far.

Case Presentation:
A 20 years old man has been suffered from increasingly dyspnea for about 6 months, initially was on exertion and eating, and then at rest. Some times his dyspnea was so severe which he needed air way intubation and respiratory support, but because existence of obstruction in his airway tract it could not be done and we had to perform urgent tracheostomy. He had no previous history of neck trauma or prolonged intubation. His oral cavity, nasopharynx, oropharynx and hypopharynx were normal in physical examination. Major salivary glands and neck examination were normal also. CT Scan of the neck showed soft tissue mass in subglottic area in.
Indirect laryngoscopy, revealed a posterior subglottic mass, caused airway obstruction. This mass resected by CO2 laser. The pathologist reports of the specimens from three deferent shilled was as follows: Several sections of connective fibromascular tissue with edematous stroma and tubular glands with a layer of epithelial and some spindle shaped myoepithelial cells that revealed distinctive feature of pleomorphic adenoma. (fig. 1). He tolerated extraction of tracheostomy tube without any complaint and didn’t have respiratory distress thereafter.

Discussion:
Pleomorphic adenoma is the most common benign salivary tumor, occurring slightly more commonly in woman and with a peak incidence during the 5th decade. These tumors are slow growing, well demarked, and usually encountered in the parotid gland. Histologically, there is morphologic diversity, including mucoid, chondroid, osseus, and myxoid elements.

The myoepithelial cell is thought the cell of origin capable of producing such a variety of characteristic of importance there are both visible excresances and microscopic prologation that account for the high recurrence rate if enucleation alone is performed. There are many factors that can lead to laryngotracheal stenosis (LTS), Most cases of adult LTS
result from external trauma or prolonged endotracheal intubation. Benign and malignant neoplasm are other causes of LTS in adults. Papilomas, chondromas, minor salivary glands and neural neoplasms are benign neoplasms that can involve any location of laryngotracheal area.

The classification of the LTS in adults begins with the anatomic location of the lesion a glottic, subglottic, trachea or combination of these. Primary tumors in the subglottic are rare comprising only 1% of all laryngeal tumors and pleomorphic adenoma is one of the rarest of these.

References: