CASE REPORT

ABRIKOSSOFF TUMOR OF THE LARYNX

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Summary: Case report about laryngeal localization of a granular cell tumor in a 38 years old female without recurrence over an observation period of two years.

***Key words**: Abrikossoff tumor; Granular cell tumor; Larynx*

Introduction

Granular cell tumor (GCT, Abrikossoff tumor) is neoplasm of soft tissue that widely occurs a throughout the body. Originally, it was named granular cell myoblastoma by Abrikossoff in 1926 (1). GCT is a relatively uncommon and nearly always benign tumor (2). The head and neck area is the most common region of GCT onset, with a tendency to occur on the skin and tongue. Laryngeal locations account for 3 to 10 % of occurrences in adult (5). A patient with laryngeal Abrikossoff tumor is presented.

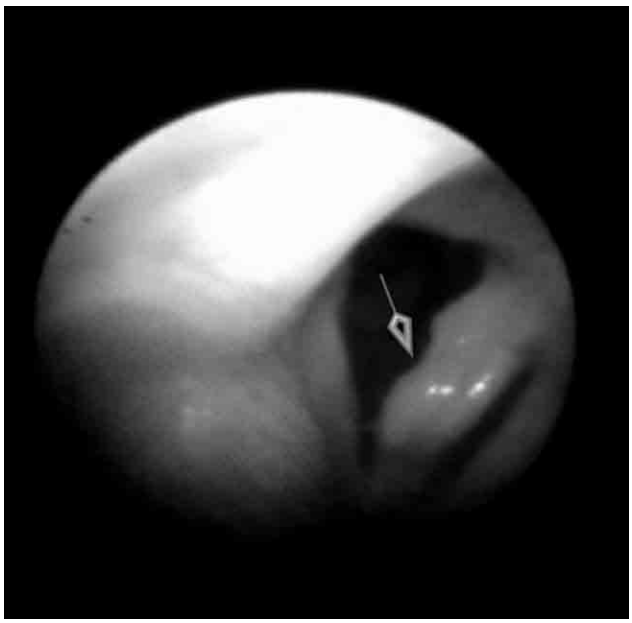

Fig. 1: The true left vocal cord region was affected by Abrikossoff tumor (arrow).

The histogenetic origin and etiology of this tumor are not well known. Different theories about tumor original have been offered. In fact, recent immunohistochemical and ultrastructural studies have supported the neurogenic origin of the tumor (4). Intracytoplasmic PAS positive granules were electronmicroscopically identified as lysosomes and /or autophagosomes (3). There is only one case in the literature in which the interarytenoid region has been affected by GCT (6).

Case report

A 38-year-old female patient was admitted to our clinic complaining of hoarseness and foreign body sensation. Her complaints started 6 months before admission and she stated that they had increased over time. A laryngeal endoscopic examination revealed a mass with a smooth surface involving the left true cord (Fig. 1). There was no cervical lymphadenopathy, and the rest of the head and neck examination was normal. The patient was neither a smoker not a drinker, and had no pertinent medical history. Informed consent was obtained before enrollment of the patient. Microlaryngoscopic surgery was performed under general anesthesia, and a histopathologic examination revealed a granular cell tumor. The tumor was excised completely. The postoperative course was uncomplicated. The histopathologic examination revealed GCT with free margins and pseudoepitheliomatous changes on the surface (Fig. 2). Two years of patient follow up were uneventful and no recurrence was found.

Discussion

Granular cell tumors are benign and rare lesions. They can arise in any organ in the body, but they have been mostly seen on the upper aerodigestive tract. The anterior part of the

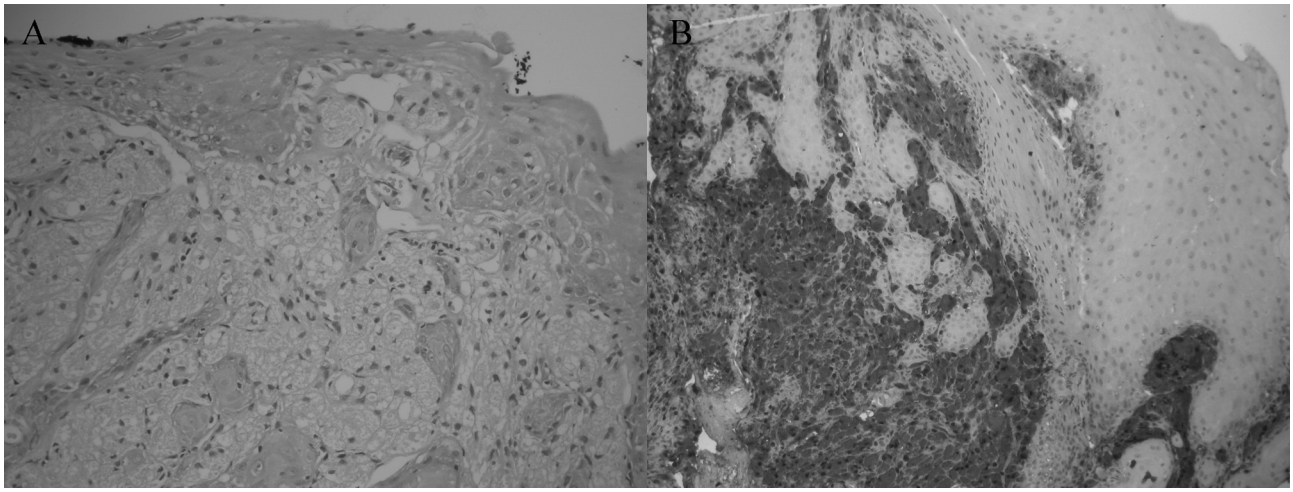

Fig. 2: The tumor composed of large cells having small-round-oval nuclei and large granular cytoplasm (A) which shows S100 protein immunoreactivity (B). There is pseudoepitheliomatous hyperplasia of the overlying epithelium (H&E and S100, original magnification 100X).

tongue and the larynx are the first and second most common sites of these tumors, respectively (2). Symptoms depend on the localization and size of the tumor. The most common symptoms for laryngeal granular cell tumors are hoarseness, cough, hemoptysis, stridor, otalgia, and dysphagia (5).

Fifty to 65 % of laryngeal granular cell tumors have pseudoepitheliomatous hyperplasia, which can lead to misinterpretation owing to the similarity of these lesions to squamous cell carcinoma (2, 6). Carcinoma imitating pseudoepitheliomatous changes may lead the surgeon to inappropriate and irreversible treatments.

The treatment procedures of GCT depend on the site and extension of the lesion. A local excision by microscopic laryngoscopy or endoscopy is performed for small tumors, whereas laryngofissure, partial laryngectomies, and irradiation are used for the largest tumors (5).

We have been following up our patient for two years and no recurrence has as of yet been found.

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