Atypical angiofibroma of larynx – a case report

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Abstract Primary extra nasopharyngeal angiofibroma of larynx is a very rare tumour. We here by present a case of angiofibroma of larynx affecting the anterior commissure & subglottic region in larynx-a rare site of involvement.

Keywords Extranasopharyngeal angiofibroma · Histology · Atypical angiofibroma

Introduction

Angiofibroma is a benign vascular but biologically aggressive tumour with a high incidence of persistence & recurrence. It is exclusively seen in nasopharyngeal region in adolescent male. Primary Extra nasopharyngeal angiofibroma is very rare. Here we are presenting a case report of a case with Angiofibroma of larynx.

Case report

A 65-year-old male patient came to our Department of Otorhinolaryngology & Head & Neck Surgery at Davangere,

India with complain of change in voice since 3 months which had been increasing gradually. There was no history of dysphagia, dyspnoea, stridor, throat pain, earache, swelling in neck, haemoptysis or loss of weight. Patient was a smoker & use to smoke 1 pack/day from last 10 years. On Indirect laryngoscopic examination smooth growth was seen in the anterior commissure. Growth is pink in color & it is involving anterior part of both vocal cords & extending to the subglottic region (Fig. 1). Neck examination shows no palpable lymphnode. Laryngeal frame work was not disturbed & laryngeal crepitus was present. Patient was diagnosed as benign tumor of glottis & was posted for Direct Laryngoscopic examination & biopsy was taken, & sent for histopathological examination . The Histology showed spindle cells, stellate cells of the mesenchymal cells separated by wavy, haphazardly arranged collagen bundles. Nuclei in stroma cells are hyperchromatic. No mitotic figures are seen. Occasionally stromal cells posses abundant cytoplasm resembling ganglion cells. Occasionally giant cells are seen. Small dilated blood vessels with RBCs are seen. Histology is suggestive of angiofibroma (Fig. 2). Microlaryngeal surgery with excision of growth was done. On follow-up small growth is seen in subglottic region which is not increasing in size. Patient is advised regular follow up. Speech therapy is advised to improve his voice.

Discussion

Primary extranasopharyngeal angiofibroma is very rare. To date approximately 60 cases have been reported in English literature [1]. The most common site for extranasopharyngeal angiofibroma is the maxillary sinus. The ethmoid and sphenoid sinuses, nasal septum, middle and inferior turbinate, conjunctiva, molar and retromolar region and larynx are other sites where extranasopharyngeal angiofibromas have been reported [2]. Etiology for extranasopharyngeal angiofibroma is due to ectopic tissue which may be located

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Fig. 1 Angio fibroma of vocal cord involving anterior commissure

Fig. 2 Microscopy of Angiofibroma showing dense fibrocollagenous stroma with small dilated blood vessels

further away than usual place and may have been the cause of the extranasopharyngeal location [3].

The patients who have different characteristic other than classical angiofibroma may be called atypical angiofibroma, under the scope of the related literature. Angiofibroma presenting with at least one of the following criteria such as origin or location other than nasopharynx, presenting complains other than nasal obstruction or epistaxis, age younger than seven or older than 25, female sex, atypical histopathology and multifocality were considered as a typical [4].

Extranasopharyngeal angiofibroma of larynx is a very rare tumour with only one reported case available in literature by Akbas Y. et al [3]. Our case present as atypical angiofibroma as many of the criterias (65-year-old person presenting with chief complain of change in voice and angiofibroma growth seen over larynx) are fulfilled. Angiofibroma of larynx can be diagnosed on careful examination of larynx with direct laryngoscopy examination. Biopsy should be taken and should be sent for histopathological examination. Endolaryngeal endoscopic or microlaryngeal surgical excision of angiofibroma can be performed. Previous case by Akbas Y. et al [3] was treated using endolaryngeal endoscopic excision. Excision of mass is the treatment of choice and recurrence is rare [3].

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