



HEMANGIOPERICYTOMA LARYNX - A RARE CASE REPORT

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Abstract : Hemangiopericytomas are rare vascular neoplasms of the head and neck. Laryngeal involvement is even rarer. Hemangiopericytomas arise from the pericytes lining the walls of vessels. The majority is benign and arises in the supraglottis. They are most often encountered in elderly patients and may bleed easily when manipulated. We present a rare case of huge hemangiopericytoma of right aryepiglottic fold obstructing the inlet of larynx which was completely resected with harmonic scalpel. The patient was regularly followed up for 1 year with no evidence of recurrence.

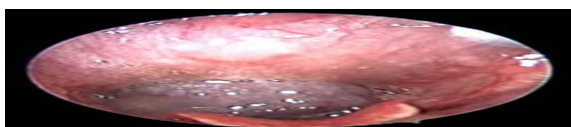
Keyword : Aryepiglottic fold, Hemangiopericytoma, Harmonic scalpel

INTRODUCTION:

Hemangiopericytomas are rare vascular neoplasms of the head and neck, representing 1.3% of vascular tumors. They arise from the pericytes of Zimmerman, which are pericapillary spindle cells that provide mechanical support and regulate luminal diameter. It was first described by Stout and Murray in 1942. Hemangiopericytomas have a propensity for local recurrence, unpredictable behavior, and the potential for distant metastasis through hematogenous spread. We present an unusual case of a supraglottic hemangiopericytoma managed successfully with harmonic scalpel.

CASE REPORT:

A 40 year female came to ENT OPD with symptoms of change in voice for 6 months, difficulty in swallowing and breathing difficulty for 2 weeks. On examination, oral cavity and oropharynx were normal. Indirect laryngoscopy showed a single bluish globular mass of size 3*3cm involving the right aryepiglottic fold, obscuring the view of the inlet of larynx; part of the left aryepiglottic fold was visualized and appears to be normal. [Pic -1]



Picture-1

Patient was tracheostomized in local anesthesia in view of airway compromise and difficult intubation. Microlaryngeal examination was done. Using harmonic scalpel, the whole of the mass was resected. Intraoperatively [Pic-2] no heavy loss of blood and we didn't have to transfuse blood intraop or postoperatively [Pic-3]. The tissue was sent for histopathological examination [fig-1] and reported as hemangiopericytoma. Postoperative period was uneventful; the tracheostomy stoma was closed and discharged. Chest radiograph and ultrasonogram of abdomen done postoperatively and was found to be normal.



Picture-2
Histopathology

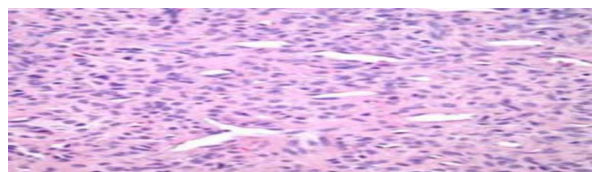
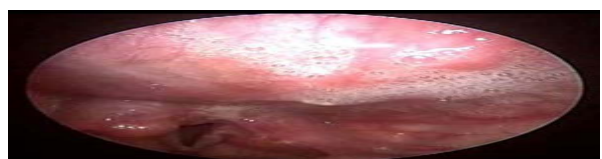


Fig-1: Numerous endothelial lined capillaries surrounded by pericytes



Picture -3

DISCUSSION:

Hemangiopericytomas are rare vascular neoplasms of the head and neck. Hemangiopericytomas are considered vascular tumors with variable malignant potential, manifested clinically by distant metastases, typically to the lung, liver and bony skeleton. While there are low rates of regional recurrence due to the hematogenous spread of hemangiopericytomas, the rates of local recurrence and distant metastases are significant. Local failure rates have been reported at 40%, while distant metastases occur in 30-33% of patients in most recent head and neck cases series². Hemangiopericytomas can be classified as benign, borderline and malignant based on histology grade, with higher grade tumors correlating with higher rates of distant metastases and decreased survival. Hemangiopericytomas arise from the pericytes lining the walls of vessels. The majority are benign and arises in the supraglottis. They are most often encountered in elderly patients and may bleed easily when manipulated¹. The clinical outcome and optimal management of hemangiopericytomas of the larynx are still unknown due to the paucity of cases reported in the literature. While sinonasal hemangiopericytoma has been well described, laryngeal involvement is much rare. The mainstay of treatment for hemangiopericytomas is surgical excision; the indications for adjunctive treatment are unknown and controversial. There are several reports of adjunctive radiation and chemotherapy in a few case series but none was proved to be successful. We used harmonic scalpel for the resection of the mass. Its ultrasonically activated coagulation shears use high-frequency ultrasound (55 kHz) to divide vessels of up to 5 mm. The active blade vibrates longitudinally against an inactive blade, combining cutting and coagulation. It operates at a relatively low temperature; consequently, there is potentially less thermal damage to surrounding tissues than electrocautery and laser. Our patient was treated successfully with harmonic scalpel and followed for 1 year without any recurrence.

CONCLUSIONS:

Hemangiopericytoma is an extremely rare vascular neoplasm with a propensity for local recurrence, unpredictable behavior, and the potential for distant metastasis. Close long-term follow up is needed since recurrence can present many years after initial treatment.

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