ISSN: 2755-0206

Journal of Pathology Research Reviews & Reports

SCIENTIFIC Research and Community

Case Report

Open Access

Adult Laryngeal Hemangioma: A Case Report

Najoua Belhaj[1,3*], Niema Benkhraba[1,3], Mohamed Ali Gliti[1,3], Sophia Nitassi[2,3], Razika Bencheikh[2,3], Mohamed Anas Benbouzid[2,3], Abdelilah Oujilal[2,3] and Leila Essakalli Houssyni[2,3]

[1]Resident physician in otorhinolaryngology, Department of Otorhinolaryngology, Head and Neck Surgery, Ibn Sine University Hospital, Rabat, Morocco

[2]Professor of otorhinolaryngology, Department of Otorhinolaryngology, Head and Neck Surgery, Ibn Sine University Hospital, Rabat, Morocco

[3]Faculty of Medicine and Pharmacy of Rabat, Mohammed V University, Rabat, Morocco

***Corresponding author**
Belhaj Najoua, Faculty of Medicine and Pharmacy of Rabat, Mohammed V University, Rabat, Morocco: E-mail: belhajnajwa1990@gmail.com

Received: June 11, 2021; **Accepted:** June 18, 2021; **Published:** June 28, 2021

Introduction

Hemangiomas are the most common congenital benign tumors diagnosed, and ~ 60% arise in the head and neck region [1, 2]. Laryngeal hemangiomas are slowly progressing vascular tumors [1,2], which are commonly diagnosed in children, but are rarer in adults. They may occur in the vocal chamber, arytenoid cartilage or aryepiglottic fold. Hemangiomas occur rarely in the larynx, particularly in adults. Symptoms include hoarseness, dyspnea, dysphagia or a pharyngeal foreign body sensation. Currently, there is no consensus regarding the treatment of hemangiomas due to their rarity. For small laryngeal hemangiomas, observation is usually sufficient. However, larger hemangiomas require treatment, and this can include surgical resection, corticosteroid injections, ethanol injections, cryosurgery, radium or gold implants, interferon treatment and laser surgery . We report the case of a laryngeal hemangioma in an adult female, who was treated surgically, without any complications.

Case Report

This is a 30-year-old patient, cholecystectomized 6 months ago, who has had permanent dysphonia for 1 month without dyspnea or dysphagia. Nasofibroscopy finds a reddish angiomatous polyp hiding the glottic plane. The cervical scanner shows the presence of a small polypoid formation measuring 10mm hanging in the supraglottic laryngeal lumen, in contact with the left vocal cord, a homogeneous hypodense that does not enhance after injection of the iodine contrast product (Figure 1). The patient benefited from resection of the polyp under direct laryngoscopy (Figure 2). The histological study was in favor of a benign hemangioma. The patient had an improved voice and no recurrence in 4 months.

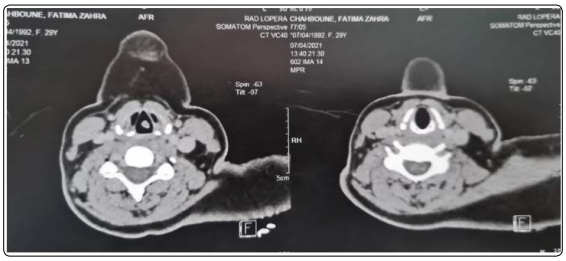

Figure 1: Cervical CT-scan: aspect of a small supraglottic polyp of 10 mm in contact with the left vocal cord.

Figure 2

Discussion

MacKenzie, in 1871, was first to describe laryngeal hemangioma [3]. Later in 1921, Sweetser differentiated subglottic hemagioma of infancy from glottic and supraglottic hemangiomas of adulthood [4]. Adult hemangiomas are rare and are more often of cavernous form [5].The etiologic factors are thought to be vocal abuse, cigarette smoking and laryngeal trauma [6]. Although most common symptom of infantile hemangioma is respiratory distress, this is almost never the case in adults [6]. Hoarseness, cough, hemoptysis, dyspnea are more common among adults [7]. Laryngeal hemangiomas are diagnosed primarily by history and laryngologic examination.Doppler ultrasound, computed tomography, technetium imaging, and plain radiographs can help in determining the dimensions and extent of the lesion [8].

In differential diagnosis of laryngeal hemangioma, branchial cleft cyts, dermoid cysts and laryngeal webs should be considered. Large branchial cleft cysts may prolapse into laryngeal cavity and result in illusion of laryngeal cysts. Squamous cell carcinoma may be associated with laryngeal cysts, usually located in supraglottic areas. Histological examination usually reveals the nature of lesion.Factors influencing choice of therapy are patient's age, type, size and localization of the tumor. In 90% of pediatric cases, hemangiomas occur by first year of life. [9] They generally undergo expansion in the first 5 months of life, followed by regression of the lesion [10,11]. If spontaneous regression does not occur, a persistent hemangioma usually responds to propronolol [12]. Large

hemangiomas are treated either surgically or by radiotherapy. Adult hemangiomas are not very progressive tumors. Small hemangiomas can be managed conservatively. Large hemangiomas can be treated by systemic steroids, injection of corticosteroids or ethanol, surgical excision, cryosurgery, radiation therapy and CO2 laser excision [13, 14]. In large lesions, even tracheotomy may be required . Removal of pediatric hemagioma with microdebrider is believed to be minimally invasive, safe, simple and effective method especially when the lesion causes tracheal stenosis >50% with recurrent infection and acute laryngeal obstruction [15]. Wang et al. stated that ultrasonic scalpel is also a safe and effective way to remove laryngeal hemangiomas [16]. Transoral robotic resection has also been proposed in treatment of laryngeal hemangioma allowing less damage to surrounding mucosal tissue and enabling easy control of bleeding [17]. Excision under microlaryngoscopy is a common surgical technique as we preferred in our patient with no complications or recurrence.

Conclusion

Adult laryngeal hemangiomas are very rare and differ from infantile ones in location of the lesion and symptoms. The treatment is mostly surgical, applying various methods, from tumor ablation to laryngectomy, depending on the size of tumor.

References

1. Martins RH, Lima Neto AC, Semenzate G, Lapate R (2006) Laryngeal hemangioma. Braz J Otorhinolaryngol. 72: 574.
2. Zheng JW, Zhou Q, Yang XJ, Yan An Wang, Xin Dong Fan et al (2010) Treatment guideline for hemangiomas and vascular malformations of the head and neck. Head Neck. 32: 1088-1098.
3. MacKenzie M (1871) Essay on Growth of the larynx. Lindsay and Blakeston, Philadelphia.
4. Sweetser TH (1921) Hemangiomas of the larynx. Laryngoscope 31: 797-806.
5. Yılmaz MD, Aktepe F, Altuntaş A (2004) Cavernous hemangiomas of the left vocal cord. Eur Arch Otolaryngol 216: 310-311.
6. Kimmelman CP, Sugar JO, Lowry LD (1979) Resident's page. Pathologic quiz case 2. Hemangioma of the vocal cord. Arch Otolaryngol 105: 500-502.
7. Akhtar S, Shamim AA, Ghaffar S, Ahmed MS, Ikram M (2012) Adult laryngeal hemangioma: a rare entity. J Pak Med Assoc 62: 173-174.
8. Stal S, Hamilton S, Spira M (1986) Hemangiomas, lymphangiomas, and vascular malformations of the head and neck. Otolaryngol Clin North Am 19: 769-796.
9. Kawakami M, Hayashi I, Yohimura K, Ichihara K, Nishikawas S, et al (2006) Adult giant hemangioma of the larynx. Auris Nasus Larynx 33: 479-482.
10. Enjolras O, Mulliken JB (1993) The current management of vascular birthmarks. Pediatr Dermatol 10: 311-312.
11. Chang LC, Haggestrom AN, Drolet BA, Baselga E, Chamlin SL, et al (2008) Growth characteristics of infantile hemangiomas, implications for management. Pediatrics 122: 360-367.
12. Celiksoy MH, Paksu MS, Atmaca S, Sancak R, Hancioglu G (2014) Management of subglottic hemangioma with propranolol. Am J Otolaryngol 35: 414-416.
13. Iriz A, Durmaz E, Akmansu ŞH, Daglı M, Albayrak L, et al (2009) Vocal Cord Hemangioma; A Rare Localization in Adults. Turk J Med Sci 39: 305-307.
14. Lin YS, Ho HS (2010) Adult Laryngeal Hemangioma. Tzu Chi Medical Journal 22: 237-240.
15. Huang Q, Lyu J, Zhang Z, Jiao Y, Wu H (2014) Treatment of infantile subglottic hemangioma by microdebrider. Zhonghua Er Bi Yan Hou Tou Jing Wai Ke ZaZh 49: 457-461.
16. Wang X, Zhao X, Zhu W (2015) Resection of a laryngeal hemangioma in an adult using an ultrasonic scalpel: A case report. Oncol Lett 6: 2477–2480.
17. Wang WH, Tsai KY (2015) Transoral robotic resection of an adult laryngeal hemangioma and review of the literature. J Laryngol Otol 6: 614-618.