Frontiera ORL
Periodical of Otolaryngology, Cervico-Facial Pathology, Audiology and Speech Therapy
Year IX, No. 1 · January 2019
ISSN 2038-4793

Ackerman's Verrucous Carcinoma. Presentation of a clinical case

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Introduction

The verrucous carcinoma of Ackerman is a rare and well differentiated tumor of the squamous carcinoma, that can manifest in the vocal cords as in the oral cavity.

Verrucous carcinoma was first described as a distinct clinicopathological entity by Dr. Ackerman in 1948. Although found primarily in the oral cavity, the larynx is the second most affected site, accounting for almost all cases.1 The incidence of verrucous carcinoma of the larynx is 1% to 2% of all malignant neoplasms that affect this organ, mostly between the ages of 40 and 69 years.2 There is a clear association between tobacco consumption and verrucous carcinoma, as well as the presence of papilloma virus as a possible etiological factor, especially genotypes 16 and 18.3

It is a well-differentiated, slow-growing verrucous tumor with invasion of local structures, without distant metastases, and local metastases are uncommon.5 Macroscopically, both appear as warty masses, with notable papillary projections of the epithelial surface. The histological appearance of the verrucous carcinoma is of a well differentiated hyperplastic epithelial lesion. A densely keratinized surface and strongly circumscribed deep margin, often described as a "pushing border", is what characterizes these tumors.6, 7 Long-term dysphonia is the most common symptom, since the glottic region was the most common site of verrucous carcinoma.

Local recurrences are common when treatment is inadequate. But its benign behavior allows conservative treatment mostly by endoscopic laser route, and selective lymph node dissection is not indicated.8

Clinical case

Obese patient, 50 years old, with permanent dyspnea, worse for walking and supine position. Supraclavicular and suprasternal chimney flow. Progressive dysphonia.

Background of larynx microsurgery in the year 2013 due to papillomatous right vocal cord lesion. Biopsy of the year 2013 with report of vegetative papillomatous lesion with abundant blood vessels.

In December of 2016 he consulted for dyspnea and dysphonia.

Fibrolaryngoscopy shows a lesion that occupies the entire glottis, vegetative, keratinized, papillomatous type.

In laryngeal microsurgery with C02 laser, lesion of the right vocal cord and the mucosa was resected. There wasn ?t invasion of the vocal ligament. The airway was permeabilized, and the patient was discharged at 5 hours.

At the control month there wasn ?t lesion with excellent voice and breathing quality
Biopsy reports tumor regions with papillomatous appearance and presence of verrucous carcinoma.
Fig. 1, 2,3: Right vocal with cord verrucous lesion.
Fig. 4: Control at the month of surgery.

Discussion

Verrucous carcinoma is a form of squamous cell carcinoma with specific clinical, morphological and cytokinetic characteristics. The term verrucous carcinoma refers to those exophytic or cutaneous squamous mucous tumors that are stacked on the epithelial surface with a papillary micronodular appearance.2

Tumors originated most frequently in the oral cavity (55.9%) and larynx (35.2%). Although the majority of patients are male (60.0%), tumors of the oral cavity are more common in older women.3

Although verrucous carcinoma is related to tobacco consumption and the presence of human papillomavirus, its etiology is not yet defined.4 The tumor most frequently in the larynx originates in the true vocal cords. The incidence of verrucous carcinoma of the larynx is 1% to 2% of all malignant neoplasms that affect this organ, with the peak incidence between 40 and 69 years.2

The most representative symptoms of verrucous carcinoma of the larynx are dysphonia and dyspnea that increase gradually.9 Diagnosis Verrucous carcinoma can only be performed by biopsy, and in some cases additional biopsies are required to assess the relationship between the epithelium and the underlying stroma. In laryngoscopy, these lesions are warty and exophytic, often resulting in superficial biopsies.10, 11 The histopathological features of verrucous carcinomas are described as well differentiated squamous lesions with local invasion through descending growth intrastromal invaginations containing fine fibrous vascular cords.12, 13 Verrucous carcinoma exists within the histologic continuum ranging from benign squamous hyperplastic lesions to invasive squamous cell carcinoma.

Distinguishing verrucous carcinoma from these benign and malignant processes can be difficult. By definition, all verrucous carcinomas are classified as well differentiated (or Grade 1)

In order to differentiate verrucous carcinoma of keratosis, verruca vulgaris or squamous carcinoma with verrucous appearance, it is necessary to obtain deep margins of the lesion, for the detection of microscopic foci of invasive squamous carcinoma inside or adjacent to the keratosis of the lesion.

Clinically, the lesions appear as grayish, exophytic and verrucous growths that tend to grow slowly and are not associated with metastases to the regional cervical lymph nodes.1

The clinical behavior of verrucous carcinoma can be destructive despite its deceptively benign microscopic appearance. These lesions can grow very large and can infiltrate extensively to destroy adjacent tissues including cartilage and bone. The presence of cervical lymphadenopathy is mostly due to reactive lymph node hyperplasia secondary to the inflammatory reaction at the stromal tumor interface.4

In 94.9% of the cases reported in the literature, the extent of the disease was only a local invasion, with little invasion of adjacent structures (4.2%), and regional metastases in only one case (0.8%). Distant metastasis was not reported in any of these cases at presentation.14 Despite their locally aggressive nature, the metastases of verrucous carcinoma are extremely rare.15

Surgery is the mainstay of treatment, achieving local control rates ranging from 77% to 100% .5, 10

The use of radiotherapy as a treatment is discussed, without reaching a concomitant due to the scarce collection of clinical cases. In addition to having a partial response to treatment with radiotherapy, some papers support the possibility of anaplastic carcinoma after radiotherapy due to the presence of the human papilloma virus.15

Conclusion

Ackerman verrucous carcinomas are rare tumors. In the presence of suspected presence, the total resection of the lesion should be performed and not a superficial biopsy, to avoid a misdiagnosis of the disease. The treatment of choice is endoscopic surgery or laryngotomies, since treatment with radiotherapy would provide an adequate re-

sponse and the possible transformation to anaplastic carcinoma

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Published 10 February 2019 · https://www.frontieraorl.it/en/ackermans-verrucous-carcinoma-presentation-of-clinical-case/