

Eccrine Acrospiroma: A Case Report and Review of Literature in Oral and Maxillofacial Surgery.

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Abstract: Eccrine Acrospiroma is a cutaneous tumor of sweat gland, usually small 1 to 2 cm with range from 0.5 cm to 12 cm. Mostly found in head, trunk and upper limbs with slight female predilection^{3,4,5}. We describe a large 5.5cm x 3cm, x 1cm erythematous, grapelike pedunculated tumor in the postauricular region of a 55 year old female. The lesion was managed with adequate excision and defect was closed with rhomboid flap. A diagnosis of benign eccrine acrospiroma was made after immunohistochemistry. There was no local recurrence ten months after the operation.

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I. Introduction

Eccrine acrospiromas are distinct sweat gland tumours that present as solitary plaques, nodules, or exophytic papules. In 1969, Johnson and Helwig introduced the term 'eccrine acrospiroma' to define a cutaneous neoplasm¹ that had been previously reported under a variety of terms, for example 'eccrine poroma' which was described first in 1956 by Pinkus H². Other synonyms of eccrine acrospiroma are clear cell, nodular, superficial or solid-cystic hidradenoma; clear cell papillary carcinoma; clear cell myoepithelioma; porosyringoma; large cell sweat gland adenoma; or basal cell carcinoma of sweat gland origin. These tumours occur as incidental solid to cystic lesions of the skin 1 to 2 cm in diameter, They affect all age ranges and involve any area of the body, and the majority of them are benign.³

We report a case of eccrine acrospiroma in a 55 years old woman over the skin surface of right post auricular region.

II. Case Presentation

A 55 years old woman came to out-patient department of Oral and Maxillofacial Surgery, Guru Nanak Institute of Dental Science and Research, Kolkata, with a lump on her right post auricular region. Her chief complaint was about ugly looking due to presence of the mass and trauma on brushing her hair. She noted that the mass was growing since its onset 2.5 years earlier. She did not give any history of pain but only mild itching. On physical examination a single 5.5x 3 cm x 1 cm firm, erythematous grapelike pedunculated mass was noted in post auricular region (Fig 1 and Fig 2). CECT scan showed non vascular lesion with no intracranial extension. (Fig 3). Provisional diagnosis was cutaneous adnexal tumor and excision biopsy performed with a surgical margin of 2 cm. This kind of excision was chosen due to the fact that the biological behaviour of the lesion could not be predicted from its clinical appearance and radiological studies³. Defect was closed by rhomboid flap (Fig 4). IHC report confirmed that the lesion was benign Eccrine Acrospiroma. (Fig. 5). (Immunopositive for CK7/ EMA/ p63 and Immunonegative for CK20/ CEA/ HMWCK/ BerEP4). After ten months, there was no evidence of local recurrence. (Fig 6)



Fig 1. Preoperative pic



Fig 2. Preoperative pic



Fig 3. Preoperative CECT



Fig 4. Closure

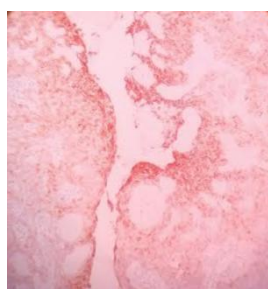


Fig 5. Immunopositive EMA



Fig 6. Ten month postoperative pic

III. Discussion

The origin of the acrospiroma has been debated. Bradon J. Wilhemi et al. in 1998 stated that enzyme histochemical staining has shown acrospiromas to contain high levels of eccrine – type enzyme-amylophosphorylase, branching enzyme, succinic dehydrogenase, diphosphopyridine nucleotide diaphorase and leucine amino peptidase- suggestive a tumor of eccrine differentiation. Electron microscopy reveals that the intracellular organelles of acrospiroma cells resembles those of immature eccrine glands. However, a specific histological finding of decapitation secretion and a recent monoclonal antibody study support an apocrine origin. Despite this discrepancy, most of authorities accept this tumor to be of eccrine origin.⁴

Hernandez-Perez and Cestoni-Parducci (1985), stated that Eccrine Acrospiroma (EA) have a bimodal age distribution, with increased frequencies in the second and sixth decades of life⁵. B.J. Wilhemi stated that these lesions are commonly found in adults between 36 to 65 years old, With a range of 1 to 93 years⁴. These tumors have slightly higher predominance in females compared to males; ratio 1.7: 1 to 2:1^{3,4,5} and found in all cutaneous sites with the greatest numbers in the head, trunk and upper limbs.⁵ More precisely trunk (40%), followed by the head (30%) and extremities (30%)³. According to Helwig, (1984) EA contain both solid and cystic components, Spontaneous drainage occurs in approximately 15% of tumours and the same percentage are painful^{5,6} and may recur but rarely undergo malignant changes⁶. As typical for cutaneous adnexal tumors, most EA's are benign and stable. Malignant forms do exist and transformation of a pre-existing benign EA into a malignant form has been reported⁷. These tumors tend to be aggressive and unresponsive to chemotherapy and radiotherapy with local recurrence rate as high as 50% and metastatic rates as high as 60%⁴.

EA usually appear as a solitary dermal nodules elevated above the surrounding skin. They are generally nonpigmented lesions but literature reveals it may be tan to reddish- blue⁵. Bluish tumors are result of intralesional haemorrhage. These lesions ranges from less than 0.5cm to 12 cm, with an average size 1cm. according to Keasby LE et al (1954) diameters of more than 4 cm were accepted as tumours of 'large size'. Most are slow growing, rapid growth can occur after trauma or haemorrhage.^{3,4}

Treatment, as with other tumours of skin appendages, is surgical. Inadequate resection will likely result in local recurrence.^{2,3,8,9} Helwig, 1984 stated that recurrence rate after initial excision is 16.5%, recurrent lesions are usually no more aggressive nor more atypical than primary lesions. Complete excision with a margin of normal tissue is the treatment of choice. Malignant variants, associated with perineural and lymphatic channel invasion, necessitate wide excision with consideration of a regional lymph node dissection.⁵

IV. Conclusion

In our case the tumor was in large size category. It was mentioned in the literature that longstanding tumours may grow to be larger than 10 cm, yet still be benign³. Literature also suggest that the size of the tumor cannot be used to differentiate between benign and malignant acrospiromas. Wide local excision is always preferred when biological behaviour of the lesion is uncertain. We can conclude that the prognosis for benign acrospiroma is good when adequately excised.

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