



## AN UNUSUAL CASE OF ECCRINE ACROSPIROMA: A CASE REPORT

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**ABSTRACT** Eccrine acrospiroma, better known as eccrine poroma, is a benign cutaneous tumour of sweat duct. Origin, seen on microscopic examination. Acrospiromas are usually 1 to 2 cm in size but they may attain sizeable proportions, on rare occasions, they may undergo malignant transformation. Their clinical aspect can masquerade as some other nodular and cystic lesions. Here we report a case of Eccrine acrospiroma of the skin surface of left side of neck in 60 years old woman, which was diagnosed as eccrine acrospiroma after doing excision biopsy on histopathological examination. 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 a cutaneous neoplasm that had been previously reported under a variety of terms, for example 'Eccrine poroma' which was described first in 1956 by Pinkush and others<sup>[1,2]</sup>. 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<sup>[3]</sup>. They affect all age ranges and involve any area of the body and majority of them are benign<sup>[4]</sup>. We report a case of eccrine acrospiroma in a 60 years old woman over left side of the neck.

**KEYWORDS :**

A 60 years old woman came to dermatology OPD with a swelling and discharge on the left side of the neck since 2 years and was referred to surgical out-patient door from dermatology department Konaseema institute of medical Sciences, amalapuram. Growth on the scalp since 1 year, with history of gradually increase in size since one year. History of Pus discharge was present. The patient was a known case of tuberculosis who was diagnosed 2 years back and carcinoma thyroid treated with chemotherapy and radiotherapy. Full blood count, liver and kidney function tests, chest x-ray and urine examination all were normal. Clinical diagnosis of cervical lymphadenopathy could be (TB recurrence or ca thyroid with primary lymphadenopathy). After biopsy and cytological examination were done features suggestive of eccrine acrospiroma was noted.

**Gross and microscopic examination**

Received two specimens

- 1) Cervical lymph node
- 2) Excised mass from the scalp

**Gross:**

1) received partially skin covered soft tissue measuring 4x3x2 cms with an ulceroproliferative growth on surface measuring 3x2 cms which is greyish white and spongy



2) Received partially skin covered with hair, soft tissue measuring 1 X 1 X 0.5 cms which is greyish white, nodular with few brownish areas.

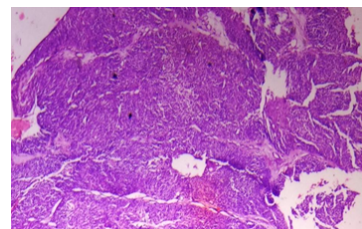


post operative scar in posterior left cervical region

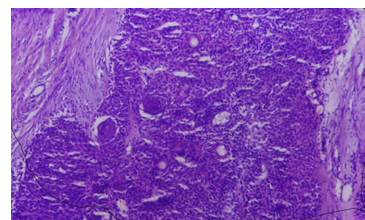
**Microscopy:**

1) Shows nests and lobules of low cuboidal cells with variable amount of cytoplasm which at places

was granular to clear in form. Areas with squamous metaplasia and keratin pearls formation were also appreciated along with increased vascularity in the tumour. Final diagnosis was consistent with eccrine acrospiroma.



**Figure 1:** H&E section under 5x show tumour consists of broad anastomosing bands of uniformly small cuboidal cells. Ductal lumen lined by single row of cuboidal cells extends horizontally through the tumour.



**Figure 2:** H&E section under 10x show nests and lobules of low cuboidal cells, areas of squamous metaplasia and keratin pearls formation also seen.

2) Sections studied from the scalp shows tumor composed of monomorphous cigar shaped basaloid cells arranged in linear rows parallel to one another producing rippled pattern. Scattered sebaceous cells and ducts are seen.

## DISCUSSION

Eccrine acrospiroma occurs as a single nodular, solid or cystic, occasionally elevated cutaneous mass.

As a rule, the skin over the tumour is either flesh-coloured, red or blue, and is smooth, but sometimes it is thickened and papillary.<sup>[5]</sup> The tumours vary in size from 0.5 to 10 cm, but most measure from 1 to 2 cm and the median size of eccrine acrospiromas is only 1 cm<sup>[4,5]</sup>.

Giant lesions are rare, but examples of such include a 12 cm tumour of the left thigh and a tumour of similar size on the dorsum of the left hand. It was mentioned in the literature that longstanding tumours may grow to be larger than 10 cm, yet still be benign<sup>[4]</sup>. In a report of three cases of benign giant eccrine acrospiroma, the smallest lesion was 5×3 cm in size and the largest one was 9.5 cm in its largest dimension<sup>[4]</sup>. These tumours usually occur in adults. Histologically, these lesions are sub-classified according to the location of tumour in relation to the epidermis, with those confined primarily in the epidermis as epidermal acrospiroma or just eccrine poroma. Those which are confined exclusively to the dermis or have minimal connection to the epidermis are termed as dermal acrospiroma or hidradenoma<sup>[6]</sup>. Large eccrine acrospiromas may foster concerns of malignancy, but malignant eccrine acrospiromas are rare usually of moderate size. In a review of the literature, the largest dimension specified for malignant acrospiromas ranged from 4 to 10 cm<sup>[4,7]</sup>.

Thus, size cannot be used to differentiate between benign and malignant acrospiromas.

Acrospiromas occur on all areas of the body, but are slightly more common on the trunk (40%), followed by the head (30%) and extremities (30%) [1,8,9]. Acrospiromas predominate in women by ratio of approximately 2:1 and occur more commonly in middle-aged and older adults, with a range of three to 93 years [1]. Approximately one-sixth of the lesions show drainage, and about the same number are painful [5]. There is also an occasional association of pruritis (7%) with these lesions.[3] The clinical differential diagnosis consists of hemangioma, squamous cell carcinoma, melanoma, metastatic tumours and other adnexal tumours [3].

Malignant acrospiroma comprises a group of rare epidermal, juxtaepidermal, and dermal ductal carcinoma occurring over the head and neck, anterior trunk, or extremities [10].

Malignant acrospiromas are highly invasive, often with significant lymphatic and distant metastasis [7]. Cellular atypia, frequent mitoses, infiltrative local growth, areas of necrosis, perineural invasion and angiolymphatic invasion are the characteristics of malignant acrospiromas [4,7]. Moreover, malignant acrospiromas tend to be predominantly solid, without the grossly cystic nature that seems to be largely responsible for the production of the giant benign tumours [4].

Treatment for benign acrospiromas consists of surgical excision. After surgical excision and the recurrent tumours were neither more aggressive nor more atypical than the primaries, and differed only in their location, which was deeper in the dermis [1]. Inadequate excision was considered to be the major cause of recurrence.[1] In addition to wide local excision, regional lymph node dissection is recommended after the diagnosis of malignant acrospiroma, even in the face of a clinically negative lymph node examination [7]. In our case as the fine needle aspiration cytology show simple breast cyst, surgeon fully excised that because he or she could not be certain about the biological behaviour of the lesion.

But on histopathological examination it was confirmed that this is benign eccrine acrospiroma, thus, the prognosis for benign acrospiroma is good and this type of lesion is not associated with recurrence when adequately excised. patient came for follow up every 2 months. There is no recurrence in our case. This is a rare entity in dermatology and surgery.

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