International Journal of Health Sciences and Research
www.ijhsr.org ISSN: 2249-9571

Case Report

Eccrine Spiradenoma - A Rare Case Report

Arnav Roychoudhury[1], Shaffy Thukral[1], Sonali Solanki[2]

[1]Assistant Professor, [2]Resident (2nd Year),
Adesh Institute of Medical Science & Research, Bathinda, Punjab- 151101.

Corresponding Author: Arnav Roychoudhury

Received: 10/12/2015 *Revised: 23/12/2015* *Accepted: 28/12/2015*

ABSTRACT

Eccrine spiradenoma is rare, benign adnexal neoplasms that have been historically defined under tumour of eccrine differentiation but recently it is being considered under the apocrine differentiation. It is easily mistaken for angioleiomyoma and glomus tumour due to its painfulness, commonly presenting on trunk and extremities as a painful dermal nodule with a blue- black hue. A 55-year aged male with a nodular swelling in the right calf for last 30 years was biopsied and sent to the Histopathology dept. for diagnosis.

Key words: eccrine spiradenoma, adnexal, basaloid.

INTRODUCTION

Eccrine spiradenoma first described in 1956, is an uncommon, benign, dermal tumour of apocrine differentiation, originating from sweat glands. [1] Classical presentation is of a small, painful, grey to pink nodule on the upper ventral aspect of the body. Mostly they occur as solitary swellings and comprises of 97 % of all the cases. The distribution is similar in males as well as females [2] and can occur any age group. The treatment of choice is surgical excision with clearing of the margins. Recurrence has also been documented in the literature. [3] It can be easily mistaken for glomus lesions or angioleiomyoma due to its painfulness and florid vascularisation. In this case report a noteworthy case of eccrine spiradenoma in the posterior calf region is presented with special emphasis on its clinical presentation, histopathological characteristics and differential diagnosis from other painful subcutaneous tumors.

CASE REPORT

We represent a case of a 55-year aged male who came to the OPD with the history of swelling in the right calf since last 30 years. The swelling increased in size gradually over a period of 30 years with rapid increase in size since the last 4 months. Family history and past medical history were insignificant. Haematological and biochemical profile was within normal limit. Ultrasonography revealed exophytic protuberant enhancing soft tissue intensity mass extending along the skin layers into cutaneous and subcutaneous fat on the medial side of medial side of upper calf. Clinical provisional diagnosis of Soft tissue tumour was given. Excision biopsy was done and the tissue was sent for histopathological diagnosis. The tissue was received in 10% formalin solution and processed for regular histopathological

slides and stained with Haematoxylin and Eosin.

Gross: Received skin covered soft tissue piece measuring 8.5 x 4.5 x 2.0 cm with protruding mass measuring 2.5 x 2 cm.

Cut Section: Shows encapsulated hemorrhagic globular swelling measuring 3.5 x 2.5 cm.

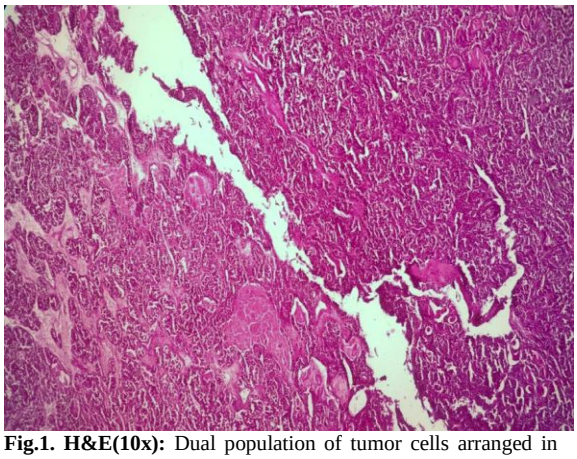

Fig.1. H&E(10x): Dual population of tumor cells arranged in lobules: small darkly stained basaloid cells located at the periphery with pale eosinophilic cells situated in the centre.

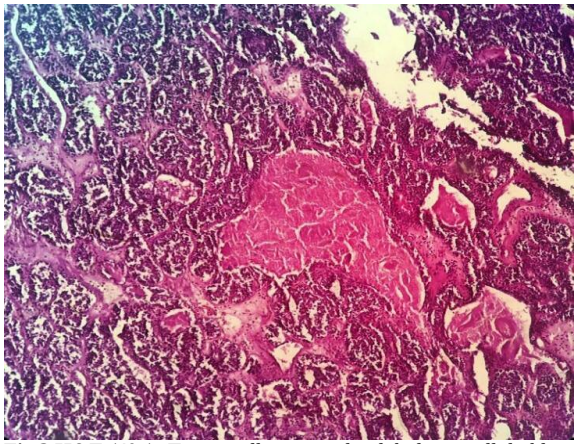

Fig.2.H&E (40x): Tumor cells arranged in lobules: small darkly stained basaloid cells located at the periphery with pale eosinophilic cells situated in the centre. Eosinophilic amorphous material seen.

Microscopy: H & E stained sections from pseudoencapsulated lesion show stratified squamous lining epithelium. The overlying epidermis is almost intact without connections to the tumour islands. Underneath seen is a circumscribed lobulated lesion consisting of dual population of cells showing round to oval basaloid cells in small clusters, lobules and places in alveolar and pseudorosette pattern. Eosinophilic amorphous material is present at places. Large thick walled vessels are seen with areas of hemorrhage and necrosis (FNAC induced). No evidence of giant cells or increased mitotic activity was seen. Histopathological diagnosis of Benign Adnexal tumour-Eccrine Spiradenoma was given.

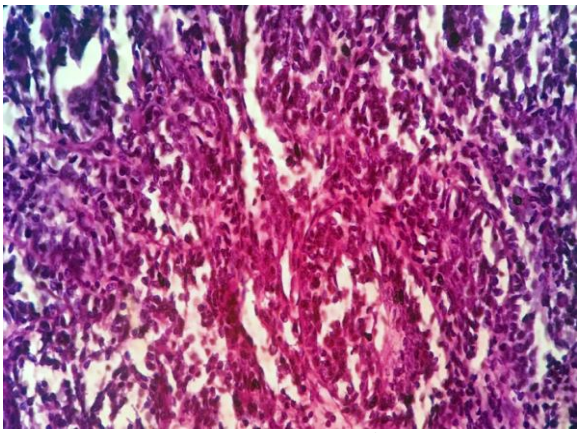

Fig.3.H&E (100X): Bimodal population of tumor cells arranged in lobules, alveolar and pseudorosette pattern.

DISCUSSION

Eccrine spiradenoma was 1st described by Kersting and Helwig. [1] They enumerated six sweat gland tumours without further grouping them. Lever classified sweat gland tumours into four groups- adenomas, hamartomas, benign epitheliomas and primary epitheliomas. [7] Eccrine spiradenoma is an uncommon well-differentiated benign tumour with its origin from the sweat gland. It classically present in 2nd to 4rth decade of life. Most cases of eccrine spiradenoma are solitary comprising of more than 97%, but multiple lesions may also be present. Similar incidence in both male as well as females is seen. They classically present clinically as a subcutaneous nodule that varies greatly in their size. A bluish hue is seen overlying the nodule thereby suggesting a clinical diagnosis. One of the most commonly seen diagnostic features is its being painful. Hence they are counted in the differentials of painful dermal tumors characterised by the popular pneumonic "LEND AN EGG," [4] which stands for Leiomyoma, Eccrine spiradenoma, neuroma, dermatofibroma, angiolipoma,

neurilemmoma, endometrioma, glomus tumour and granular cell carcinoma. [5] A differential diagnosis of glomus tumour should be strongly ruled out when there is significant evidence of vascular hyperplasia.

The definitive diagnosis of eccrine spiradenoma consists of skin biopsy. It comprises of large, sharply circumscribed, basophilic nodules (cannon balls) arranged in sheets, cords as well as in cords in the subcutaneous tissue. Basaloid cells are composed of dual population of cells. One cell type being large, pale with ovoid shaped nuclei, other being small, dark with hyperchromatic nuclei.

Malignant transformation is seen generally in patients who had long standing benign eccrine spiradenoma, presenting with rapid enlargement, increase in number, change in color or with development of non specific symptoms such as pruritis, pain and ulceration. Histological diagnosis is based on the presence of increased number of atypical mitosis, loss of typical pattern, foci of necrosis and the extension of the tumour cells along the line of the fibrous capsule. [6]

Histologically it is essential to differentiate eccrine spiradenoma from that of glomus tumour as they overlap considerably in their histological features. Previous studies by Englander et al have suggested that these two entities may be the extreme variations on a continuous spectrum of dermal tumors originating from a common progenitor. [3] With the advancement in the pathological and immunohistochemical presentations, an improved diagnosis may be achieved.

CONCLUSION

Eccrine Spiradenoma is an adnexal tumour of the sweat glands with its etiology yet to be identified clearly. It may present as congenitally or as a de novo. Early accurate diagnosis is very important in identifying onset of malignant transformation. Malignant Eccrine spiradenoma is extremely rare and if undiagnosed or treated, proves to be lethal. Case reports describing interesting and variable clinical presentations are important in maintaining awareness and proper treatment protocols.

REFERENCES

1. Kersting DW, Helwig EB. Eccrine spiradenoma. *AMA Arch Derm*. 1956; 73(3):199-227.
2. Nath AK, Kumari R, Thappa DM. Eccrine spiradenoma with chondroid syringoma in Blaschkoid distribution. *Indian J Dermatol Venereol Leprol*. 2009; 75(6):600-602.
3. Englander L, Emer JJ, McClain D, Amin B and Turner RB: A rare case of multiple segmental eccrine spiradenomas. *J Clin Aesthet Dermatol* 4:38-44, 2011.
4. Naversen DN, Trask DM, Watson FH, Bueket JM.Painful tumors of the skin: "LEND AN EGG" *J Am Acad Dermatol*. 1993; 28:298-300.
5. Apatenko AK, Turusov VS. The painful tumours of skin. *Neoplasma*. 1968; 15(2): 187-202.
6. Tanese K, Sato T, Ishiko A. Malignant eccrine spiradenoma: case report and review of literature, including 15 Japanese cases. *Clin Exp Dermatol*. 2009; 35(1):51-55.
7. Lever WF. Myoepithelial sweat gland tumour, myoepithelioma; report of three cases with review of literature. *Arch Dermatol* 1943; 5:332-47.

How to cite this article: Roychoudhury A, Thukral S, Solanki S. Eccrine spiradenoma - A rare case report. Int J Health Sci Res. 2016; 6(1):589-591.

****