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# Eccrine spiradenoma (ES): A rare adnexal tumour

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#### Abstract

Eccrine spiradenoma is an extremely rare adnexal tumor of the sweat gland, first described in 1934 by Sutton and later by Kersting *et al.*, in 1956. It commonly presents as a painful, nodular, slow-growing mass on the upper trunk, head and neck region, usually between 15-35 years of age. Eccrine spiradenocarcinoma, its malignant counterpart also exists with a metastasis rate of 50% and mortality rate of 37%, making the diagnosis of ES essential. A biopsy is usually essential for proper identification of this rare tumour as it resembles other dermal lesions such as leiomyoma, dermatofibroma, angiolipoma, glomus tumour, papilloma and neurofibroma. We herein describe a case of Spiradenoma in a 37 year old gentleman who presented to the General surgery department at our hospital. Owing to the paucity of data, no guidelines for the optimal management of ES cases currently exists in the literature. Our case was unusual as the tumour was non-tender and had a pedunculated, papilloma-like configuration as opposed to usual nodular configuration.

Keywords: Spiradenoma, eccrine spiradenocarcinoma, biopsy, excision, recurrence

#### Introduction

Eccrine spiradenoma is an extremely rare adnexal tumor of the sweat gland, first described in 1934 by Sutton and later by Kersting *et al.*, in 1956 <sup>[1]</sup>. It commonly presents as a painful, nodular, slow-growing mass on the upper trunk, head and neck region, usually between 15-35 years of age <sup>[2]</sup>. It is asymptomatic and solitary in most of the cases, however in approximately 22 cases, multiple ES have been reported in the literature <sup>[3]</sup>. Eccrine spiradenocarcinoma, its malignant counterpart also exists with a metastasis rate of 50% and mortality rate of 37%, making the diagnosis of ES essential <sup>[2,4]</sup>. A biopsy is usually essential for proper identification of this rare tumour as it resembles other dermal lesions such as leiomyoma, dermatofibroma, angiolipoma, glomus tumour, papilloma and neurofibroma <sup>[3]</sup>. We herein describe a case of Spiradenoma in a 37 year old gentleman who presented to the General surgery department at our hospital. Owing to the paucity of data, no guidelines for the optimal management of ES cases currently exists in the literature. The work has been reported in line with the SCARE criteria.

### Case report

A 37 year old male patient came with history of swelling over the left side of the chest for 3 years which gradually increased in size and with complains of dull aching pain over the swelling. On, local examination there was 5 x 4 cm solitary swelling on the left side of chest, globular in shape and connected by a stalk at its base. It was tender on palpation, firm in consistency, with overlying skin stretched and no local rise in temperature. The regional lymph node examination was unremarkable.

A soft tissue scan demonstrated a well-defined lesion with heterogenous internal echotexture in the subcutaneous plane of left pectoral region with no deeper extension into the muscular plane. The patient was then posted for Excisional biopsy. The specimen was sent for histopathological examination. A nodular piece of skin covered soft tissue was received in the Pathology Department, the cut surface of which showed a grey white lesion measuring 3.4x2.7x2.6 cm in the dermis and less than 0.1 cm from the base. Microscopy showed a well circumscribed neoplasm in the dermis composed of round nodules of basaloid cells admixed with clear cells, arranged in solid, reticular and trabecular patterns. Focal squamous metaplasia was noted. The stroma showed hyalinization with numerous vascular channels. The neoplastic cells stained positively with cytokeratin immunostain.



Fig 1: 5 x 4 cm solitary swelling on the left side of the chest

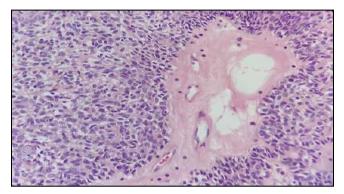


Fig 2: Cells surrounded by hyalinized stroma

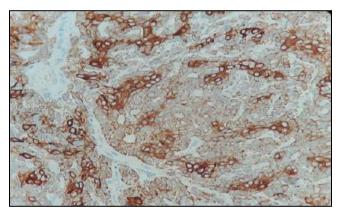


Fig 3: Cells positive for Cytokeratin

# Discussion

Superficial soft-tissue tumors are grouped into two major categories: The cutaneous (or epidermal-dermal) tumors and the subcutaneous fat layer (or subcutaneous) tumors. The group of Cutaneous tumors contains those tumors arising from skin appendages such as hair follicles, sebaceous glands, and sweat glands <sup>[5]</sup>. Eccrine spiradenoma (ES), arising from the group of epidermal-dermal soft-tissue tumors is a rare, benign tumor which commonly presents as a solitary, intradermal and painful nodule on the face and upper trunk <sup>[6]</sup>.

Our case was unusual as the tumour was non-tender and had a pedunculated, papilloma-like configuration as opposed to usual nodular configuration. The recognition of this entity is important because of the potential occurrence of its malignant version, eccrine spiradenocarcinoma. It manifests as sudden rapid growth accompanied by erythema, increased pain, ulceration, necrosis and appearance of satellite nodules with latency period of six months to 70 years [7]. Apart from this, de-novo appearance of malignant

ES can also occur and can lead to devastating consequences, since these have metastases in 40-50% of the cases <sup>[8]</sup>. The most common metastatic sites are lymph nodes, lung, brain, liver and bone <sup>[7, 8]</sup>. Morphologically, other skin adnexal tumours such as poroma and cylindroma may be considered in the differential diagnosis. Cylindoma has a solid jig saw pattern of arrangement of cells whereas poroma shows only basaloid cells and lacks the clear cells seen in a spiradenoma. Ultrasonography can help in knowing the morphological features like nature, size, depth and vascularity of the nodules and also their relationship with adjacent structures and vessels <sup>[5]</sup>.

The treatment is usually surgical which includes conventional surgery or Mohs micrographic surgery. The Mohs technique was considered as the best option due to advantages like small recurrence rates <sup>[5]</sup>. Although an excision of a benign-appearing dermal lesion may not be warranted straightaway, it is important to keep a close watch and educate the patient about signs of aggression, in which case a diagnosis of ES should be kept in mind and to plan timely intervention. ES is a rare entity which can be confused with other dermal lesions clinically and should always be considered in the differential diagnosis of all dermal lesions including papilloma. Histopathological examination is gold standard for its diagnosis until date and the prognosis is usually poor due to multiple recurrences. Written informed consent was obtained from the patient for

publication of this case report and accompanying images

#### **Conflict of Interest**

Not available

## **Financial Support**

Not available

#### References

- 1. Kersting DW, Helwig EB. Eccrine spiradenoma. AMA Arch Derm. 1956;73:199-227.
- 2. Dhua S, Sekhar D. A rare case of eccrine spiradenoma treatment and management. Eur J Plast Surg. 2016;39:143-6.
- 3. Ren F, Hu Z, Kong Q, Sang H. Multiple segmental eccrine spiradenoma with a zosteriform pattern: a case report and literature review. Ann Dermatol. 2015;27:435-8.
- Hantash BM, Chan JL, Egbert BM, Gladstone HB. De novo malignant eccrine spiradenoma: A case report and review of the literature. Dermatol Surg. 2006;32:1189-98.
- Yakup Yesilkaya, Burak Demirbas, Ozay Gokoz, Deniz Akata. Eccrine Spiradenoma of the Thigh:Sonographic Findings and Review of the Literature. Journal of Diagnostic Medical Sonography. 28;6:311-313.
- 6. Swami SY, Shriniwas P, Dalve KT. Eccrine spiradenoma. Med J DY Patil Univ. 2016;9:5467.
- Andreoli MT, Itani KM. Malignant eccrine spiradenoma: a meta-analysis of reported cases. Am J Surg. 2011;201:695-9.

8. Tay JS, Tapen EM, Solari PG. Malignant eccrine spiradenoma: case report and review of the literature. Am J Clin Oncol. 1997;20:552-7.

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