Eccrine Spiradenoma

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ABSTRACT

Introduction: Eccrine spiradenoma is extremely rare adnexal tumor of the sweat gland, mainly affecting middle aged persons with equal incidence in males and females. It is frequently a benign tumor characterized as solitary, painful deep - seated dermal nodule with most common sites being the upper thorax and face.

Case report: A 35 year old male presented with multiple, painful swellings over scalp,face,anterior chest and back since 6 months with loss of weight and appetite for 2 months. On examination, patient had a single cervical lymph node of size 1*1cm in the right posterior triangle of neck. Multiple tender subcutaneous, hard, nonmobile swellings present over several areas with largest(2*1cm) over anterior chest wall. Histopathologically diagnosed as Eccrine spiradenoma which revealed clusters and sheets of cells having mild pleomorphic round to ovoid bland nuclei with indistinct cytoplasmic borders, occasional duct or follicular appearance and empty looking lumina with no necrosis or mitotic activity.

Conclusion: Eccrine spiradenoma, a rare benign adnexal tumor confirmed by histopathological examination. Differential diagnosis include, Neuroma, Dermatofibroma, Glomus tumor, Angiolipoma, Cylindromas and leiomyomas. Diagnosis confirmation by histopathological examination is crucial because of its potential for malignant transformation. Its prognosis is poor as it has multiple recurrences. Histopathological examination is gold standard for the diagnosis.

Keywords: Eccrine Spiradenoma

INTRODUCTION

Eccrine spiradenoma is extremely rare adnexal tumor of the sweat gland, arising from the intradermal straight part of the duct of eccrine sweat glands mainly affecting middle aged persons with equal incidence in males and females. The presentation of the benign counterpart is often that of a single nodule that may or may not be tender.[1] It is frequently a benign tumor characterized as solitary, painful deep - seated dermal nodule with most common sites being the upper thorax and face.[2] Malignant transformation is suggested by the typical history of a longstanding benign lesion (mean duration of preexisting lesion is 20 years), that suddenly becomes enlarged, ulcerated & tender with change in it's color.[1]

CASE REPORT

A 35 year old male presented with multiple, painful swellings over scalp, face, anterior chest and back since 6 months with loss of weight and appetite for 2 months [Fig 1,2].

Examination

Patient had a single cervical lymph node of size 1*1cm in the right posterior triangle of neck. Multiple tender subcutaneous, hard, nonmobile swellings present over several areas with largest(2*1cm) over anterior chest wall. Surface is smooth and Skin over swelling is pinchable.

Systemic Examination

CVS: S1 S2 heard,No murmurs
RS: B/L NVBS heard,No added sounds
P/A: Soft,non tender,No organomegaly
CNS:No focal neurological deficit

Investigations

Blood Investigations – Unremarkable
2D ECHO – LVEF : 61.3%
USG ABDOMEN - normal

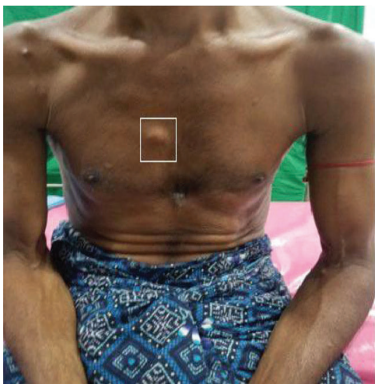

Figure-1: Subcutaneous nodule over anterior chest

Figure-2: Subcutaneous nodules over face and right shoulder

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How to cite this article: M. Murali Krishna, Y.S. Sarma, M. Srihari Babu. Eccrine spiradenoma. International Journal of Contemporary Medical Research 2020;7(2):B1-B3.

DOI: http://dx.doi.org/10.21276/ijcmr.2020.7.2.7

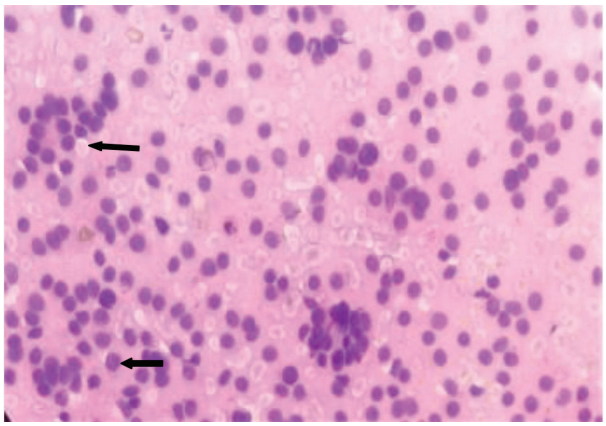

Figure-3: Cellular smears shows clusters and sheets of cells having mildly pleomorphic round to ovoid bland nuclei, Cytoplasm borders are indistinct. Occasional duct/follicular appearance seen. Lumina are empty looking . No necrosis and mitotic activity.

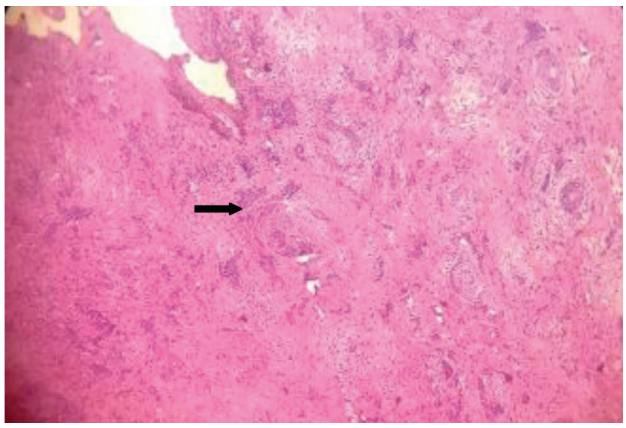

Figure-4: Dermal tumour extending from superficial dermis to deeper dermis made up of basaloid to squamoid cells arranged in irregular compressed cords and islands in desmoplastic stroma,a feature seen in Desmoplastic Trichoepithelioma.

CHEST X RAY PA view – normal

DISCUSSION

Superficial soft-tissue tumors can be grouped into two categories: cutaneous (or epidermal-dermal) tumors and 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.[3]

Eccrine spiradenoma (ES), arising from the group of epidermal-dermal soft-tissue tumors was a dermal tumor of apocrine sweat glands. It is a rare, benign tumor, first described in 1956. The most common clinical presentation was a solitary, intradermal, and painful nodule, the most frequent areas in the body were found to be the face and chest.[2] They usually present as typically small, discrete, well defined, and were found to be embedded in normal eccrine sweat glands.Research shows no age, gender or common site predilection.[3,4]

These tumors are usually benign but the signs of malignancy include new onset of pain, color change of nodule, a rapid increase in size, increase in severity of tenderness or new onset of ulceration of a stable nodule. Once these become malignant, they usually metastasize to the lymph nodes, bones, lungs, brain and shows an aggressive clinical course.[3] With the etiology of the tumor being unknown from several studies, it frequently occurs along with other skin adnexal tumors such as trichoblastoma, trichoepithelioma, and cylindroma.[4]

Ultrasonography can play an important role in the diagnosis of these tumors in knowing the morphological features like nature, size, depth and vascularity of the nodules and also their relationship with adjacent structures and vessels.[3] The definitive diagnosis of the tumor can be made from the study of the skin biopsy of the lesion [Fig 3,4] and also from the cytological study of the fine needle aspirate of the lesion. In the histopathological examination, basophilic lobes are seen under lower magnification due to the dense nuclei of tumor cells. Underhigher magnification, two different morphologies of the basaloid cells can be seen: they are seen as either larger cells with clear cytoplasm and ovoid nuclei or smaller cells with darker cytoplasm and compact hyperchromatic nuclei.

S-100 protein is usually seen in neural crest-derived cells, and chondrocytes, adipocytes, myoepithelial cells, macrophages, Langerhans cells, dendritic cells, and keratinocytes. Several research studies have shown the evidence of these tumors expressing S- 100 protein, the immunohistochemical marker of neural tissue suggesting a link of these tumors with neural tissue, a potential area for further research. The differential diagnosis usually includes anaplastic carcinoma, adenocarcinoma, squamous and basal cell carcinomas, and other adnexal neoplasias, such as cylindromas; in addition to mesenchymal tumors. Diagnosis cannot be confirmed on clinical suspicion.

The treatment is usually surgical. the most frequent options include conventional surgery or Mohs micrographic surgery. The Mohs technique was considered as the best option due to advantages like small recurrence rates.[4]

CONCLUSION

Eccrine spiradenoma,a rare benign adnexal tumor confirmed by histopathological examination.Differential diagnosis include,Neuroma, Dermatofibroma, Glomus tumor, Angiolipoma, Cylindromas and leiomyomas. Diagnosis confirmation by histopathological examination is crucial because of its potential for malignant transformation. Its prognosis is poor as it has multiple recurrences. Histopathological examination is gold standard for the diagnosis.

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Source of Support: Nil; **Conflict of Interest:** None

Submitted: 29-12-2019; **Accepted:** 24-01-2020; **Published:** 11-02-2020