

## ORIGINAL RESEARCH PAPER

# **Dermatology**

# ECCRINE SPIRADENOMA: A RARE ENTITY-CASE SERIES

**KEY WORDS:** Eccrine spiradenoma, sweat gland, benign adnexal tumor, piloleiomyoma

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BSTRACT

Eccrine spiradenoma is an uncommon benign adnexal tumor originating from the eccrine sweat gland. 2 Patients typically presented to the dermatology clinic with chief complaints of well circumscribed solitary nodules over face and neck region. Differential diagnosis was kept as spiradenoma and piloleiomyoma and skin punch biopsy was taken and was sent for histopathologic examination. Histopathologic confirmation was received with diagnosis of Spiradenoma.

## INTRODUCTION

Spiradenomas are well differentiated, benign tumors originating from sweat glands. The common age for spiradenomas is between 15 to 35 years. These benign tumors are commonly encountered over head, neck and trunk region. It usually appears as a single nodule, but also appears rarely as multiple nodules, and being distributed as a linear form or zosteriform [1]. It can occur mainly in the head, neck, and trunk and sometimes accompany with pain and tenderness [2]. Spiradenomas with varying morphology like multiple linear, zosteriform, nevoid and blaschkoid spiradenomas have been reported. They may present congenitally or spontaneously as tumor of the sweat glands with unclear etiology. Early diagnosis and prompt management is very necessary for preventing chances of recurrence and more importantly identification of onset of malignancy.

## CASE 1

32-year-old-male presented to the dermatology clinic with chief complaints of multiple well circumscribed firm skin-colored nodules measuring approx.  $1.2 \,\mathrm{cm} \times 1 \,\mathrm{cm}$ . These nodules were seen in a linear fashion over mandibular region extending onto the neck for 6 months. He typically gave history of appearance of solitary nodule which later increased in number and size to attain the current size and morphology. Skin punch biopsy was performed and was sent for histopathological examination. Haematological and biochemical profile were within normal limits.



Figure 1- nodules in a linear fashion over mandibular region and neck

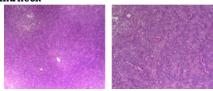


Figure 2- Histopathological report of the patient

On histopathological examination-

Biopsy shows an epithelial neoplasm in mid dermis that is extremely well circumscribed. The neoplastic cells are

basaloid and are arranged in closely crowded reticulate pattern that form variously sized nodules. Within these nodules can be seen several scattered ductal structures lined by eosinophilic cuticle. Several darker lymphocytes like cells dot the neoplastic nodules. Final impression was Spiradenoma.

Patient was hence advised for surgical excision and was instructed for regular follow ups to check for any recurrence.

## CASE 2

22-year-old-male presented to the dermatology clinic with chief complaints of single well defined firm erythematous nodule measuring approx. 1 cm  $\times$  1 cm. This nodule was seen on the neck for 6-7 months. He typically gave history of appearance of solitary papule which later increased in size to attain the current size and morphology. Skin punch biopsy was performed and was sent for histopathological examination. Haematological and biochemical profile were within normal limits.

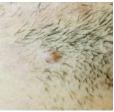


Figure 3- solitary erythematous nodule over neck

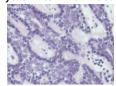


Figure 4- Histopathology report of the patient

# On histopathological examination-

Several populations of large basaloid cells with pale nuclei with central cells showing moderate eosinophilic cytoplasm with peripheral smaller cells showing scanty cytoplasm overlying hyalinised stroma. Final diagnosis was spiroadenoma.

Patient was advised for fractional CO2 laser ablation and was asked to follow up to see for any recurrence.

## DISCUSSION

Eccrine spiradenoma (ES) is a benign adnexal tumor that

presents as a small, typically tender, and bluish nodular lesion mainly on the ventral aspect of the upper body. Most eccrine spiradenomas are solitary tumors, however, multifocal or multiple lesions have been reported. It classically presents in patients between the ages of 20 and 40 years and is primarily described as a firm or soft and spongy textured, round or ovoid-shaped and blue-colored lobulated mass, ranging in size from 0.5 to 5 cm in diameter. The most striking clinical feature of ES lesions is the presence of pain or tenderness [3]; however, no excrutiating pain was presented in the current case. The majority of ES presentations are solitary, with males and females being affected equally [4] About 50 cases of eccrine spiradenoma have been reported in the literature to date [5]. To date, about 15 cases of linear/zosteriform/nevoid multiple spiradenomas have been reported [6]' [7].

Spiradenomas appear to be caused by a defective tumor suppressor gene. A mutation in CYLD gene on chromosome 9 is found in Brooke-Spiegler syndrome, which features multiple spiradenomas [8]. The specific cause of solitary spiradneomas is not clear. Originally thought to be of eccrine differentiation, recent studies have suggested that spiradneomas may be derived from apocrine glands or the folliculosebaceous unit.

In patients with long standing benign eccrine spiradenoma, malignant transformation is known to occur and presents as rapid enlargement of the nodule, increase in number, and change in color or with appearance of few symptoms such as a pain and ulceration [9].

Treatments for ES have not been well established; however, surgical excision is currently the gold standard option, with low rates of recurrence documented [3]. Other treatment options, including radiotherapy, carbon dioxide laser ablation and chemotherapy, have also been proposed although no studies have substantiated an optimal practice [10]. For cases of familial ES, genetic counselling has been advised [11].

## Declaration of patient consent

The author certifies that they have obtained all appropriate patient consent forms. In the form, the patient has given his/her consent for the images and other clinical information to be reported in journal. The patient understands that the name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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Nil

## Conflicts of interest

There are no conflicts of interest.

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