

Case Report

Eccrine spiradenoma: A Case Report

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Abstract: Eccrine spiradenoma is a rare benign adnexal tumour, most often occurs in the trunk and head-and-neck region. Due to low incidence of this tumour, it may be overlooked or misdiagnosed on primary examination. We are presenting a case of eccrine spiradenoma in middle aged male presented with a solitary nodule on nape of neck.

Keywords: Eccrine spiradenoma, benign, adnexal tumour

INTRODUCTION:

Eccrine spiradenoma is a rare benign adnexal tumour of the eccrine sweat glands [1, 2] very rarely it can undergo malignant change. It is exceedingly rare, accounting for roughly 1 of 13,000 specimens submitted to a dermatopathology laboratory [3]. In 1956, Kersting and Helwig described this condition, referring to it as a rare benign tumour that develops from the sweat gland [2]. It usually presents as a solitary nodule and, less commonly, as multiple lesions with a zosteriform distribution [2, 4].

CASE REPORT

A 40-year-old male presented with a nodular swelling on nape of his neck (measuring around 3.5x3cm), present since 2yrs and gradually increasing in size. The mass was brownish, non-fluctuant, and mildly tender. No other lesions on the skin with the same features were noted. No regional lymphadenopathy was detected. A provisional clinical diagnosis of neurofibroma was made.

Grossly lesion was irregular, grey white, soft to firm nodule measuring 3.5x2.5x1.5cm. On histopathological examination the nodule consisted of sharply demarcated lobules located in the dermis with no attachment to the epidermis, composed of groups of tumour cells arranged in sheets, cords, trabeculae and poorly formed tubular structures, separated by hyalinised stroma. Two types of cells were appreciated, the cells of the first type had small, dark nuclei located at the periphery of the cellular aggregates. The cells of the second type had large, pale nuclei arranged around a small lumina. Lymphocytes were seen scattered within the tumour nodules (Fig 1). The lumina at places contained PAS positive diastase resistant eosinophilic material (Fig 2).

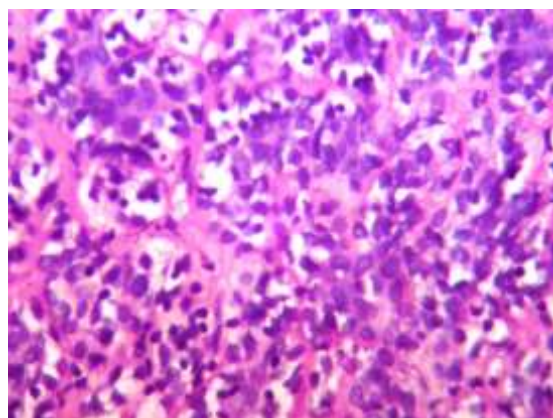


Fig1: Eccrine spiradenoma: demonstrating two cell types. Larger cells have granular chromatin and focal vesicular change. The smaller cells, exhibit a denser chromatin pattern.

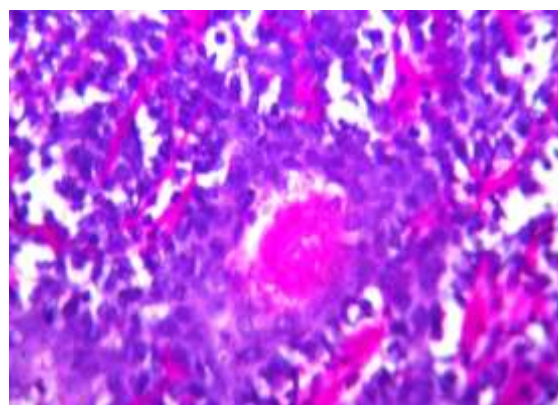


Fig 2: Eccrine spiradenoma: demonstrating PAS positive diastase resistant eosinophilic material in the lumina surrounded by tumour cells.

DISCUSSION

Eccrine spiradenoma is a benign adnexal tumour that typically appears as a small and firm bluish nodule and is usually tender on palpation. While most present as

solitary lesions on the anterior surface of the upper body, cases of multiple tumours also exist. Random multiple tumours have been reported to occur on the chest, upper extremities, forehead, and scalp [5]. Approximately one third of eccrine spiradenoma occur in the head and neck, one third on the trunk, and one fifth on the extremities [6].

It occurs in young and middle-aged adults, without predilection for either gender. Histopathologically, eccrine spiradenoma presents as one or more intradermal lobules surrounded by a fibrous capsule without connections to the epidermis. The epithelial cells within the tumor lobule are arranged in intertwining cords with two types of epithelial cells. The cells of the first type have small, dark nuclei located at the periphery of the cellular aggregates. The cells of the second type have large, pale nuclei arranged around a small lumina [1].

The present case had presented as a solitary tender nodule over the back in a middle aged male with the characteristic histopathologic findings seen on excision of the nodule.

The etiology of eccrine spiradenoma is not well understood. Trauma has been implicated as an inciting factor, but no mechanism has been elucidated. Treatment requirements are not well understood, but recurrence is rare [5]. The clinical diagnosis is often confused with neuromas, leiomyomas, neurofibroma, hidradenocarcinoma of the sweat glands, glomus tumours, lipoma, angioliipoma, dermatofibroma, hemangioma and angioleiomyoma [2]. Malignant transformation has been reported to occur adjacent to benign lesion, and, therefore, multiple cores biopsies through the mass or open, incisional biopsy is recommended, in order to avoid the sampling error [7]. Low incidence of this tumour may lead to a delay in diagnosis and treatment [5].

CONCLUSION

Eccrine spiradenoma is an uncommon benign skin adnexal tumour and is usually overlooked or misdiagnosed on primary examination because of the nonspecific clinical and imaging findings. Failure to identify its morphologic features may lead to a mistaken diagnosis and sometimes over treatment.

REFERENCES

1. Park JW *et al*; A Case of Eccrine Spiradenoma in a Patient with Neurofibromatosis. *Ann Dermatol*, 2010; 22(2):191-193.
2. Alfonso-Trujillo, Arteaga-Hernández E, Pérez-Suárez J.C. Eccrine Spiradenoma in a Zosteriform Distribution: Presentation of a Case. *Actas Dermosifiliogr*. 2009;100(7): 619-620.
3. Padmini HR, Dinesh P; A rare and unique case of eccrine spiradenoma of the eyelid. *Jornal of Evolution of Medical and Dental Sciences* 2013; 2 (11):1700 –1703.
4. Elder D, Elenitas R, Johnson B, Ioffreda M, Miller J, Miller O. Tumores de los anexos epidérmicos. In: Elder D, Elenitas R, Johnson B, Ioffreda M, Miller J, Miller O, eds. *Lever. Histopatología de la piel*. 8th ed. Buenos Aires: Editorial Intermédica. 1999; 651-99.
5. Mambo NC; Eccrine spiradenoma: clinical and pathologic study of 49 tumours. *J Cutan Pathol*, 1983;10 (5):312-320.
6. Yun *et al*. Eccrine spiradenoma: a case report. *J MaxofacSurg*, 1988; 46:905-7.
7. Siegel HJ, Said-Al-Naief N, Long J, Lopez-Ben RR, Klein M. Giant Eccrine Spiradenoma of the Hand. *Am J Orthop*, 2008; 37(8):141-3