Case Report

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Chondroid Syringoma: A Rare Case Series of Cutaneous Adnexal Neoplasm

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Abstract

Chondroid syringomas (CSs) are rare, mixed tumors of the skin arising from the eccrine sweat glands with tumor differentiation in the epithelial and mesenchymal tissues. The most common sites are head and neck, although they may be also found in the axilla, trunk, limbs, and genitalia. It is a more frequent in male adults and is usually benign. It is treated surgically and its diagnosis is histological. It can be classified as eccrine and apocrine according to its pathological characteristics. The incidence of CS is <0.01% of all primary skin tumors. Malignant CSs are rare. We report four cases of CSs occurring at different sites over a period of 2-year.

Key words: Benign, Chondroid syringoma, Eccrine glands, Histology, Neoplasms

INTRODUCTION

A chondroid syringoma (CS), also known as mixed tumors of the skin, are composed of both epithelial and mesenchymal components. Lesions are typically located on head and neck, and are non-ulcerating, slow growing, subcutaneous, or dermal nodules. Incidence of CS has been reported as <0.01% of primary tumors of the skin.[1] CS usually affects middle-aged or older male patients. Headington divided CSs into apocrine and eccrine variants based on histological differences in the luminal morphology, but there remains debate as to their exact origin. The term "CS" was introduced by Hirsch and Helwig in 1961. They proposed the following microscopic diagnostic criteria: (a) Nests of cuboidal or polygonal cells; (b) intercommunicating tubuloalveolar structures lined with two or more rows of cuboidal cells; (c) ductal structures composed of one or two rows of cuboidal cells; (d) occasional keratinous cysts; and (e) a matrix of varying composition in hematoxylin and eosin stain.[2] On samples from fine-needle aspiration biopsy, there is a usually mesenchymal tissue with a chondroid appearance and an epithelial component. Diagnosis of CS is mainly histological. The treatment of choice for CS is a wide surgical excision.

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CASE REPORTS

Case 1

A 40-year-old male presented with a subcutaneous gradually increasing swelling measuring 2 cm × 2 cm over right cheek from last 2 years. Fine-needle aspiration cytology (FNAC) of the swelling revealed benign adnexal neoplasm. Histopathology revealed a nodular lesion with differentiation toward the adnexal ductal epithelium with chondromyxoid and adipocytic differentiation in the stroma (Figure 1).

Case 2

A 15-year-old male presented with swelling over bilateral foot. One of the swellings was 3 cm × 2.5 cm from last 3 months and the other swelling was 1.5 cm × 1 cm presented since last 1½ months. FNAC of lesion was not done. Grossly both the lesions were well encapsulated and gray-brown with no areas of hemorrhage and necrosis. After excision, both the lesions showed similar histology (Figure 2).

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Case 3

A 55-year-old female presented with a swelling measuring 6 cm × 3 cm over left arm. The swelling was gradually increasing from last 1.5 months and was clinically suspicious of some infective pathology. FNAC showed the presence of mesenchymal tissue with a chondroid appearance and an epithelial component and was reported was benign neoplasm. On microscopy, similar histology was noted.

Case 4

A 48-year-old male presented with a left thigh swelling of size 4 cm × 3 cm from last 6 months. FNAC of the lesion was inconclusive. After excision, the lesion showed similar histology (Figures 3 and 4).

DISCUSSION

The CS is a rarely mixed tumor of sweat gland origin that has both a benign and malignant form.[3,4] In 1961, Headington divided CS into two groups, including apocrine type and eccrine type, based on their histopathological appearance.[5] CSs share similarities with pleomorphic adenomas, which are mixed tumors arising from the salivary gland.[6] In contrast to pleomorphic adenomas, CSs are thought to arise from sweat glands.

CSs most commonly occur in the head and neck and usually present with solitary, solid, painless, non-ulcerative, subcutaneous, or intracutaneous slow growing nodule.[7,8] However, Sungur *et al.*, reported a benign case where rapid growth, ulceration, and necrosis was evident at tumor site.[9] Less commonly, this tumor can develop on the scalp, eyelid, hand, foot, forehead, axillary region, abdomen, penis, vulva, and scrotum.[10-12]

Radiological features of CS are not as suggestive as the histological findings. The MRI features are non-specific, but can accurately depict the anatomic extent and identify tissue of origin, depth of invasion and relation to adjacent structures, such as muscles and bones.[13] Treatment of choice is excision of the tumor.

CS is a benign tumor. However, rare cases of malignant CS have been reported. These malignant forms occur more commonly in younger female patients and have a predilection for occurring on the trunk or extremities.[4,9]

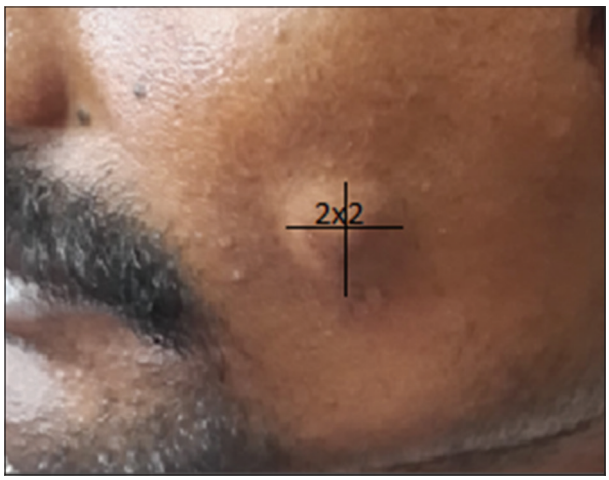

Figure 1: Subcutaneous swelling over cheek

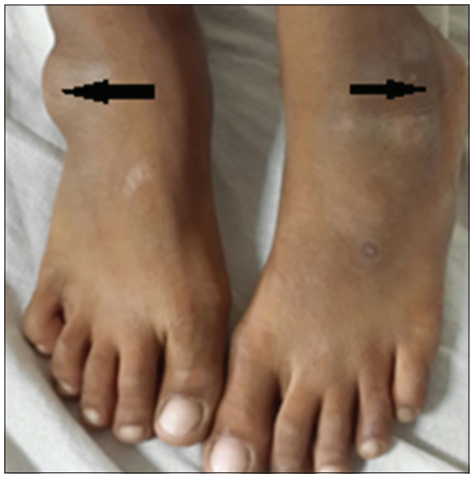

Figure 2: Bilateral swelling over foot

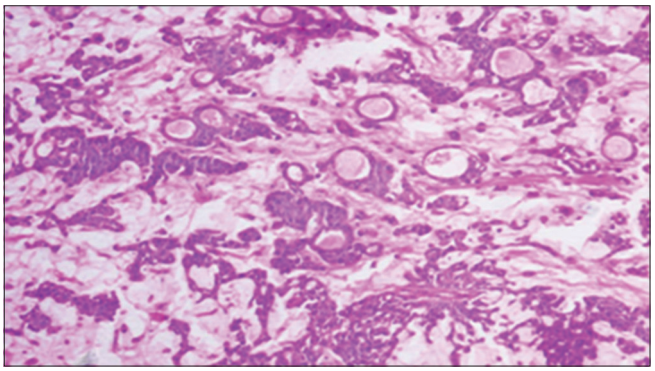

Figure 3: Photomicrograph of H and E stained section showing chondromyxoid matrix and tubular ducts (×200)

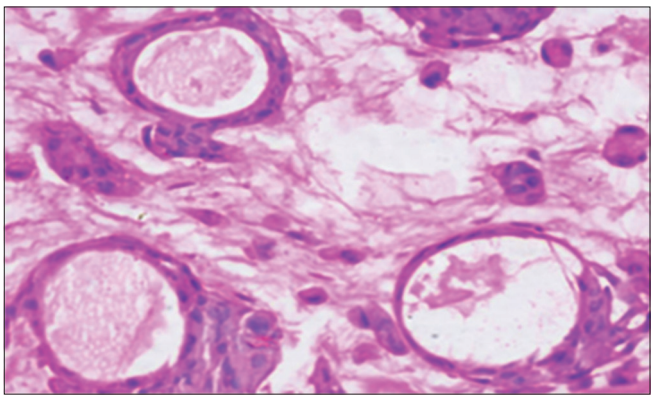

Figure 4: Photomicrograph of H and E stained section showing tubular ducts lined by single row of cuboidal cells

These tumors often are larger than 3 cm and are locally invasive. Histological findings such as cytologic atypia, infiltrative margins, satellite tumor nodules, tumor necrosis, and involvement of deep structures are considered as signs of malignant transformation.[14] Close follow-up of these tumors is recommended because of the risk of malignancy and recurrence.

CONCLUSION

The CS is a rare subcutaneous tumor composed of mesenchymal and sweat gland elements that are usually found in the head and neck. This tumor is most often benign and is usually seen in men, however, malignant forms do occur. Excision is the treatment of choice, thereby making early identification advantageous. Importantly, the histology does not always predict the clinical behavior of the tumor, and benign-appearing lesions have been known to metastasize.

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