CHONDROID SYRINGOMA – A CASE REPORT

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ABSTRACT
Chondroid syringoma or mixed tumour of the skin is an uncommon benign sweat gland tumour. It is the cutaneous counterpart of pleomorphic adenoma of the salivary glands. The clinical presentation of conodroid syringoma is non-specific and its histological diagnosis can prove difficult. We report a case of chondroid syringoma arising from a swelling on face in a 40 year old male. The diagnosis was made on histopathological examination. Surgical tumour excision remains the best therapeutic option to avoid relapse of this tumour. Close follow-up is recommended because malignant transformation, although rare, is possible.

INTRODUCTION

Chondroid syringoma, mixed tumour of skin most often occurs as solitary slowly growing nodule. Chondroid syringomas are benign, nodular, non-ulcerated tumours that occur predominantly on the face, head, and neck but also on the extremities and trunk. Appearance on other parts of the body is unusual. It usually occurs in middle aged and elderly patients.[1] It was described by Billorth in 1859 for a group of tumours of the salivary gland that contained varying amounts of mucoid and cartilaginous material.[2] Virchow and Minssen at referred to them as mixed tumors with both epithelial and mesenchymal origins.[3] We present a rare case of chondroid syringoma on the face of a young male.

CASE REPORT

A 40 year old male presented with a swelling on face over the previous 8 months. There was no history of pain, discharge or previous surgery. Gross examination of the excisional biopsy revealed a 1.5 × 1 cm, firm, nodular grey – white soft tissue mass covered with skin and surrounded with capsule – like tissue. Histological examination reveals abundant bluish chondroid stroma intermingled with a fibro-adipose tissue containing epithelial structures arranged in small aggregates and ducts. The epithelial cells are cuboidal with an eosinophilic cytoplasm and regular oval nuclei (Fig. 1). There were numerous nests of polygonal cells and interconnecting tubuloalveolar structures lined by two layers of cuboidal epithelial cells (Fig. 2). The constellation of findings leads to a diagnosis of chondroid syringoma.

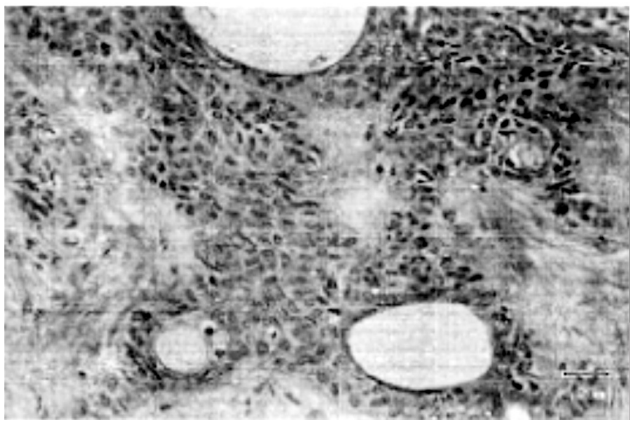

Fig. 1: *Photomicrograph of chondroid syringoma showing tubuloalveolar structures lined with two layers of cuboidal cells at 400 × (H&E) magnification.*

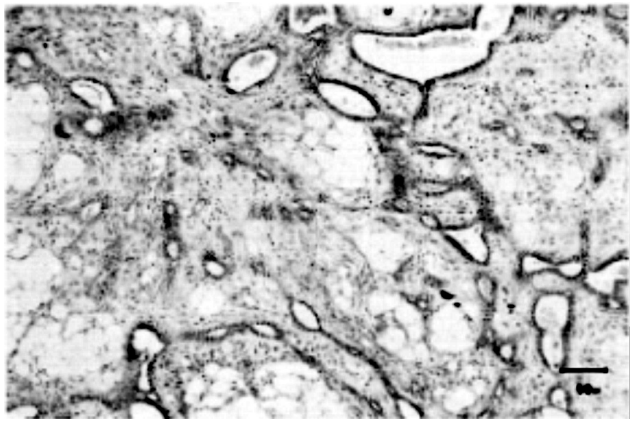

Fig. 2: *Photomicrograph of chondroid syringoma showing chondroid stroma admixed with epithelial structures at 40 × (H&E).*

DISCUSSION

Chondroid syringoma, also known as *mixed tumour of the skin,* benign adnexal tumour with an unknown

aetiopathogenesis.[3] Some authors suggest the hypothesis of both epithelial and mesenchymal origin.[4] CS is also thought to originate from both secretory and ductal segments of the sweat gland, and both eccrine and apocrine variants have been described.[5]

Hirsch and Helwig gave them the appellation *chondroid syringoma* because of the presence of sweat gland elements set in a cartilaginous stroma. They proposed the following five histological criteria for diagnosis: 1) nests of cuboidal or polygonal cells; 2) intercommunicating tubuloalveolar structures lined with two or more rows of cuboidal cells; 3) ductal structures composed of one or two rows of cuboidal cells; 4) occasional keratinous cysts; 5) a matrix of varying composition. Chondroid syringomas may have all five characteristics or manifest only some.[6] The reported incidence of CS among primary skin tumours is less than 0.01 percent.[7] Chondroid syringoma usually affects middle– aged or older male patients.[3] In our case, it occurred in a 41 year old male.

Clinically, CS presents typically as a slow growing, painless, firm, non-ulcerated subcutaneous or intracutaneous nodule. The lesion commonly measures 0.5 – 3 cm in diameter.[8] However, larger forms of CS have been described.[9-11] The sites of predilection for CS are on the head and neck region, particularly cheek, nose, or skin above the lip.[8] Less commonly, this tumor can develop on the scalp, eyelid, orbit, hand, foot, forehead, axillary region, abdomen, penis, vulva, and scrotum.[12,13] Chondroid syringoma is often overlooked because of rarity of this tumor and unremarkable clinical presentation.[3]

The differential diagnosis of CS is made with other benign tumors of epidermal or mesenchymatous appendages such as dermoid or sebaceous cyst, neurofibroma, dermatofibroma, basal cell carcinoma, pilomatricoma, histiocytoma, and seborrheic keratosis.[12] CS lesions usually are not clinically distinctive and the diagnosis is made on microscopic examination.[14]

Histologically, CS consists of mixed epithelial and mesenchymal elements, with epithelial cells arranged in cords and forming tubules with a myoepithelial layer, set in a myxoid or chondroid stroma.[15] Immunohistochemical study shows focal positivity for keratin, vimentin, desmin, and S_{100} protein in the stroma.[4] In our patient, histological examination revealed an abundant chondroid stroma intermingled with some epithelial structures arranged in small aggregates and ducts (Fig. 1).

Optimal treatment of benign chondroid syringomas is surgical excision. Fine needle aspiration cytology has been used for diagnostic purposes and may prove useful to determine pathology before excision; however examination of excised tissue is most reliable in establishing a definitive diagnosis.[16] Because of the lobulated nature of the tumor, it is important to include a margin of normal tissue with the excision to ensure complete removal of the tumor.

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