

## CUTANEOUS PLEOMORPHIC ADENOMA WITH APOCRINE DIFFERENTIATION- AN UNCOMMON ENTITY AT AN UNUSUAL SITE

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### ABSTRACT

Benign mixed tumor of skin also known as Chondroidsyringoma is a rare tumor composed of epithelial and mesenchymal elements. It can arise from apocrine or eccrine glands of skin. Rarely it involves the adnexal glands of eyelids. Mainstay of treatment is complete surgical excision. A 43 year old female presented with a nodular lesion in the left upper eyelid. The conjunctiva was not involved. There were no restriction of movements. Clinically it was diagnosed as a sebaceous cyst. Histopathological examination is important for a confirmatory definite diagnosis as it is easily misdiagnosed.

#### Key words:

Apocrine, Mixed tumor,  
Chondroidsyringoma, Eyelid.

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### INTRODUCTION

Benign mixed cutaneous tumor or pleomorphic adenoma of skin also known as Chondroid syringoma, is a tumor comprising of dual cell population of epithelial (apocrine or eccrine) and mesenchymal components (fibrous, myxoid, mucoid, chondroid).<sup>1</sup>

Mixed tumor usually occurs in the parotid gland. Cutaneous pleomorphic adenoma is quite rare. It can arise from eccrine or apocrine glands of skin, mostly involves cheek, nose, upper lip area and rarely around the ocular area.<sup>2,3</sup>

Chondroid syringoma is one of the unusual tumors in the adnexal glands of eyelids.<sup>4</sup>

This tumor is difficult to differentiate clinically from other subcutaneous eyelid lesions.<sup>5</sup> Histopathological examination is an indispensable tool for a definite diagnosis.

#### Case Report

A 43 year old female presented with a nodular lesion over the left upper eyelid just below the medial canthus since one year. The mass gradually increased in size to the present size. On physical examination, the mass was firm, freely mobile and non-tender. The overlying skin showed no signs of inflammation or pigmentation. The conjunctiva was not involved. There was no restriction in ocular movements. Ophthalmological examination was unremarkable. The clinical

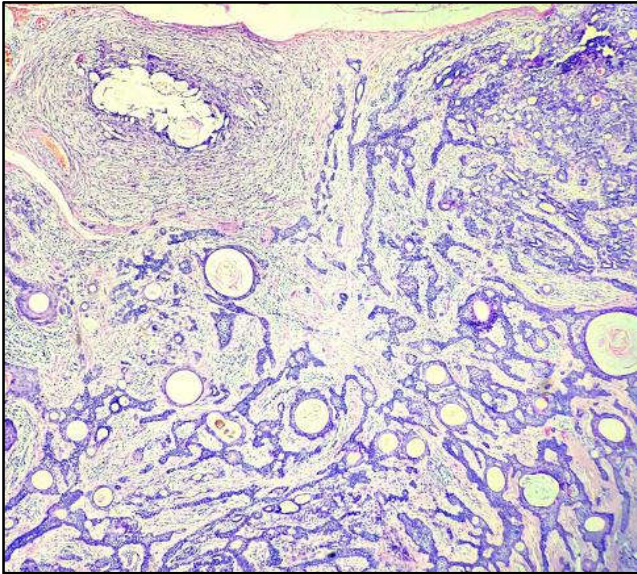
diagnosis was sebaceous cyst and the mass was excised for histopathological examination.

The specimen was received in 10% buffered formalin. On gross examination, the mass measured 1x0.5x0.3cm. Cut surface showed grayish white, homogenous areas. No keratinous or cheesy material was noted.

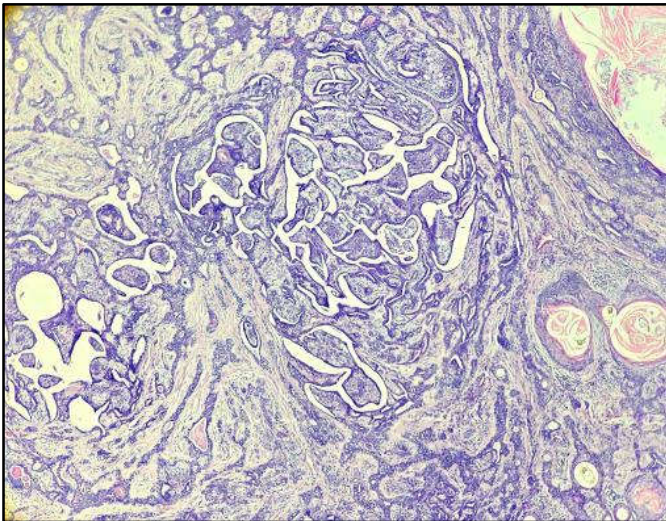
Microscopic examination showed a well circumscribed tumor with a thin fibrous capsule. The tumor consisted of dual epithelial and stromal components. The epithelial component comprised of many branching interconnected cords, tubules, nests and cystic structures showing two layer arrangement of cells, inner columnar and outer cuboidal cell layer interspersed in a chondromyxoid stroma. The tubular structures show decapitation secretions (apical snouts) of the inner cell layer and amorphous eosinophilic material was seen in the lumina. Also pseudo-papillae were seen protruding into the lumen. Many keratinous cysts were seen. Cystic structures containing lamellar keratinized material with surrounding histiocytic giant cells were also noted. Areas of squamous differentiation were also evident. No necrosis, atypia or mitotic activity or satellite lesions were noted. Patient remained asymptomatic without signs of local recurrence in a 2 year follow-up period.

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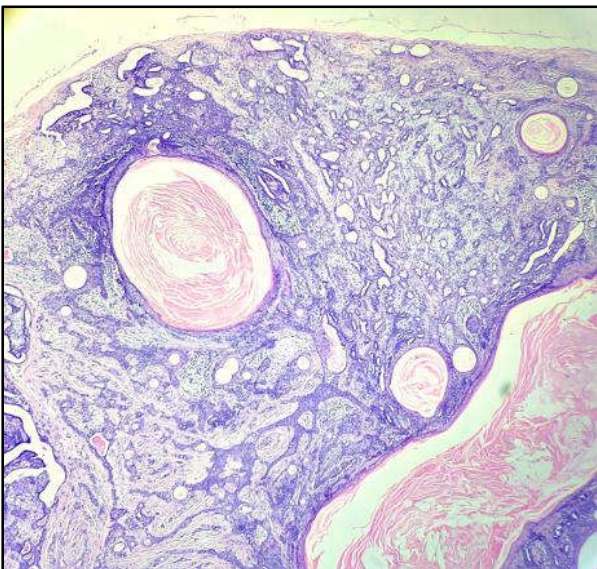
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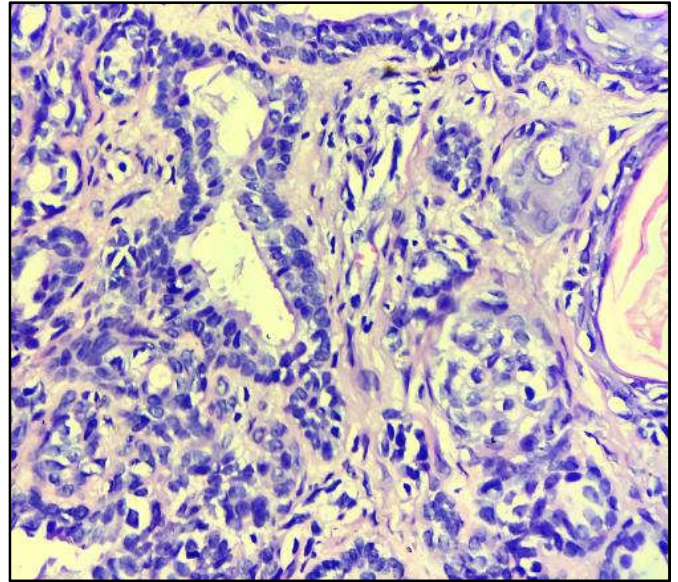
**Figure 1** Microphotograph showing a biphasic tumor composed of an epithelial component and a stromal component. (H & E stain, 4X).



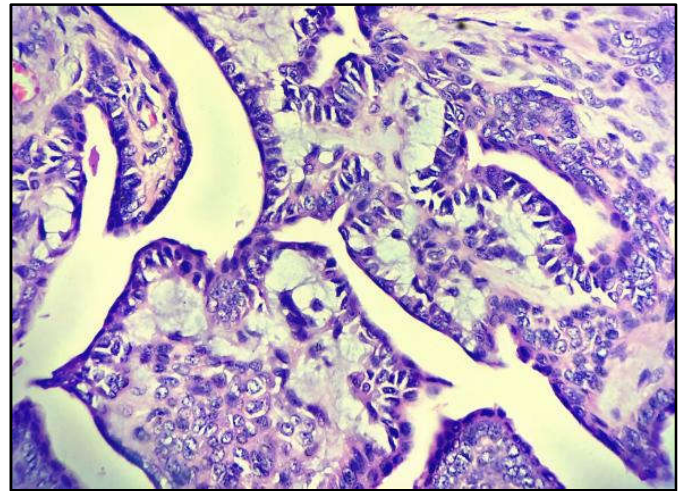
**Figure 2** Microphotograph showing epithelial glands arranged in nests, cords and tubules. Lace-like pattern of the tubulo-alveolar structures is also apparent. (H & E Stain, 10X).



**Figure 3** Microphotograph showing numerous keratinous cysts. (H & E Stain, 4X).



**Figure 4** Microphotograph showing duct with a double layered epithelium. (H & E stain, 40X).



**Figure 5** Microphotograph showing stroma containing chondromyxoid matrix. (H & E stain, 40X).

## DISCUSSION

Mixed tumors of skin usually occur in middle aged men commonly involving head and neck region. In our case patient was 54 year old male. (1,6,7,8--6). The tumors are called as mixed because of the biphasic pattern of epithelial and myoepithelial components interspersed within a mesenchymal stroma which can be chondroid, myxoid, fibrous or even osseous.<sup>6</sup>

Apocrine mixed tumors has a predilection for salivary glands but can occur at other sites. Mixed tumors of skin have a frequency of 0.01-0.098%. Only about 26 tumors have been reported in the eyelid.<sup>1</sup>

Headington classified chondroid syringoma into apocrine and eccrine types.<sup>7</sup>

Based on histopathology, apocrine and eccrine differentiation can be confirmed. Apocrine glands are restricted to the axilla, nipple, ano-genital areas. In the periorcular area, they are called as glands of Moll. Histomorphological differential diagnosis includes eccrine and apocrine hydrocystomas, hidradenoma, mucinous adenocarcinoma, adenoid cystic carcinoma.

Most distinctive feature of apocrine origin is tubular and cystic branching lumina lined by a double row of epithelial cells. Also scalloping of glands towards the luminae or presence of decapitation secretion is another important differentiating feature.

Hypercellularity, nuclear atypia, pleomorphism, tumor necrosis, mitotic activity and infiltrative margins are features of malignancy. Eccrine Chondroid syringoma is characterized by a homogenous and monotonous pattern. The epithelial component comprises of tubular lined by a single layer of epithelial cells evenly dispersed in a chondroid matrix.

Clinically these lesions are asymptomatic, slow growing tumors. They present as a circumscribed, firm, multilobulated mass of size ranging from 0.5-3 cm in diameter.

Hirsh and Helwig coined the term chondroid syringoma due to the presence of sweat gland elements within a cartilaginous stroma.<sup>8</sup>

Mainstay of treatment is complete excision with few millimeters safety margin. These tumors are usually encapsulated and well- circumscribed but the patients must be monitored due to risk of local recurrence and malignant transformation.<sup>9,10</sup>

## CONCLUSION

We are reporting this case because of its rarity and its unusual site of occurrence in eyelid. It is misdiagnosed hence histopathological examination is mandatory for a definitive confirmatory diagnosis. Complete surgical excision is the treatment of choice and a close follow-up is recommended for chances of recurrence and a risk of malignant transformation.

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## Conflicts of Interest

There are no conflicts of interests.

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