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Case Report

# A clinically malignant alike skin bump with cartilagenous alike histopatholgy- A rare case report of chondroid syringoma

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ABSTRACT

Chondroid syringoma is a rare benign adnexal tumor of skin accounting for only about 1% of commonly encountered skin tumors. It contains both epithelial and mesenchymal stromal component, hence refered as mixed tumor of skin.Its cytological features of have rarely been published in the literature. A mucoid aspirate, abundant chondromyxoid matrix material, and epithelial components were suggested as diagnostic criteria. We report here a case of chondroid syringoma with its cytological features due to its challenging clinical diagnosis.



## 1. Introduction

Chondroid syringoma is a benign, skin appendageal tumor. It is also known as mixed tumor of the skin as it contains epithelial and mesenchymal stromal components.[1] It usually involves head and neck region and presents as asymptomatic slow growing, firm subcutaneous or intra dermal nodule. Due to its non-specific presentation, diagnosis is usually made by histopathologic studies.[2] However, CS can be diagnosed using fine needle aspiration cytology.[3]

## 2. Case Report

A 52 year old female presented with complains of dark coloured skin lesion on left lateral side of nose for 4 months increasing in size and associated with pain. There was history of manipulation with safety pin present after which yellowish and blood discharge was seen, for which she took antibiotics for 5 days after which little improvement was there. There was no history of fever or trauma prior to the lesion. On examination Single black dome shaped tender nodule of size approx. 1.5*1.5cm with central umbilication, soft to firm consistency with surrounding hyperpigmentation was present on left lateral side of nose. It was fixed to underlying structure. There was no regional lymphadenopathy. On dermoscopy, central featureless white area in starbust pattern and peripheral globular brownish grey pigmentation interspersed with eccrine gland openings. Infected sebaceous cyst, Pigmented dermatofibroma, Nodular basal cell carcinoma and Keratoacanthoma were the differentials considered. FNAC was advised and it showed tight cohesive epithelial cell clusters admixed with discretely scattered ovoid spindle shaped cells with black nuclei, moderate to scanty cytoplasm, few cells show pigmentation. Possibilities of Nevus and Benign epithelial tumor were considered. So complete excision biopsy was performed and sample sent for histopathology. H&E section showed large to irregular wedge shaped tissue with overlying epidermis and dermis. Dermis shows well defined tumor tissue with cells arranged in nests, loose sheets, cords, intact and fragmented irregular gland like pattern.

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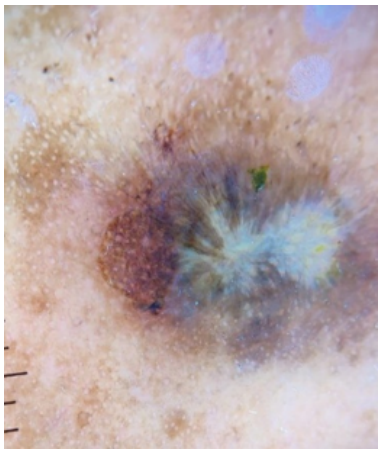

**Fig. 1:** Dermoscopy-Shows central featureless white area in starbust pattern and peripheral globular brownish grey pigmentation interspersed with eccrine gland openings.

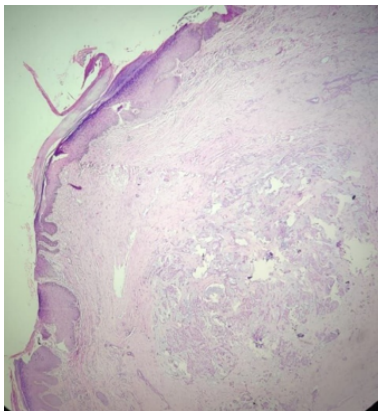

**Fig. 2:** H&E- Dermis shows well defined tumor tissue with cells arranged in nests, loose sheets, cords, intact and fragmented irregular gland like pattern.

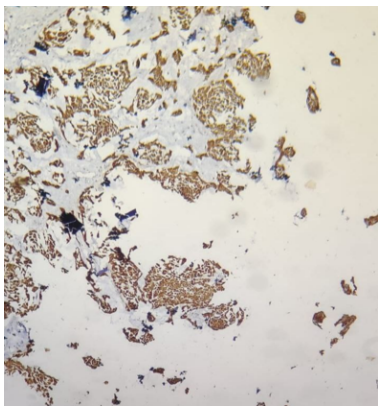

**Fig. 3:** CK 7 Positive

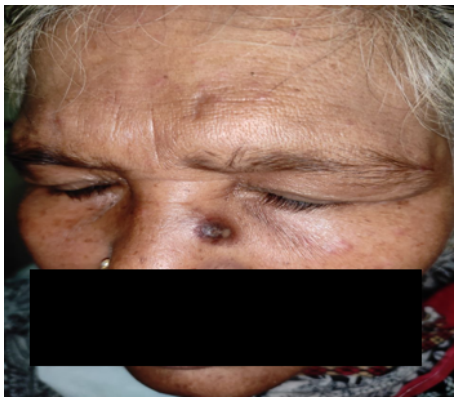

**Fig. 4:** Single black dome shaped tender nodule of size approx. 1.5*1.5cm with central umbilication, soft to firm consistency with surrounding hyper pigmentation.

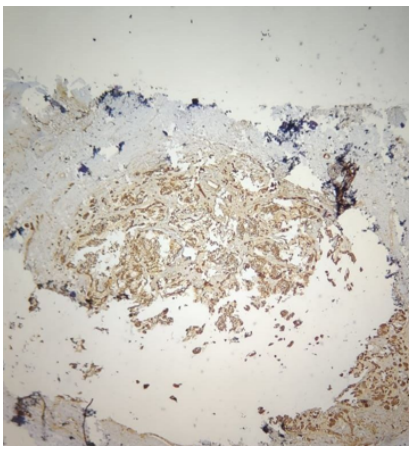

**Fig. 5:** S100positive

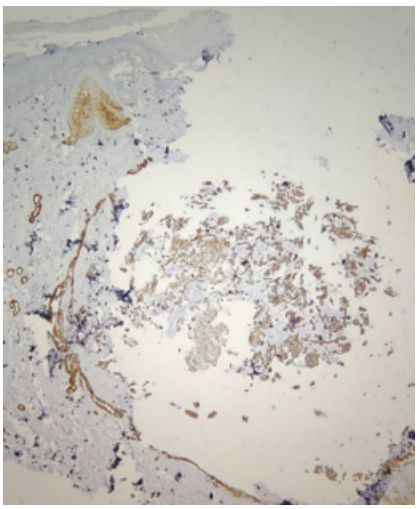

**Fig. 6:** CK 20 positive

Cells are round polygonal with abundant cytoplasm with large round vesicular nucleus and clumped chromatin, inconspicous eosinophilic nucleoli with some moderate nuclear atypia. Intervening tissue shows fibromucoid tissue, surrounding tissue shows fibro collagenous tissue, features suggestive of poorly differentiated adnexal tumor and IHC study was advised. Immunohistochemistry study showed S100- strong diffuse positive, CK7 – positive, CK20- positive, P63- focal positive, ER and Gata3- negative. Based on clinic histopathology and immunohistochemistry study diagnosis of chondroid syringoma was made.

## 3. Discussion

CS is a rare, mixed tumor of the sweat-gland, with incidence of <0.01% of skin tumors. First described by Billroth in 1859.[4] It can have a benign and malignant form. It presents as a slow growing, asymptomatic, skin coloured intradermal or subcutaneous nodule of varying size from 0.5cm to 3cm usually affecting the head and neck region.[1] CS clinically mimics epidermal cyst, pilar cyst, calcifying epithelioma, or solitary trichoepithelioma.[5] Histopathology is the gold standard for diagnosis. Histologically, two types of chondroid syringomas can be recognized: One with tubular and cystic, partially branching lumina and the other with small tubular lumina. The former type is much more common than the latter and shows marked variation in the size and shape of the tubular lumina; it also shows cystic dilatation and branching. Embedded in an abundant stroma, the tubular lumina are lined by two layers of epithelial cells: A luminal layer of cuboidal cells and a peripheral layer of flattened cells.[6] In cytological features of CS, predominance of chondromyxoid elements and presence of only epithelial cell clusters is seen most commonly than myoepithelial cells. Treatment of choice is surgical excision but should have regular follow-up to look for local recurrence and features of malignancy. The recurrent lesions can be treated by surgical excision.[7]

Although CS is a benign tumor, rarely malignant transformation can occur, which can be treated with surgical excision along with chemotherapy and radiotherapy.

## 4. Conclusion

Including the cytological features of the present case among the diagnostic criteria for cytodiagnosis of chondroid syringoma might increase the chances of definitive preoperative diagnosis and help in proper management of the case.

## 5. Conflicts of Interest

None.

## 6. Source of Funding

None.

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