

Axillary Swelling: An Unusual Presentation of Chondroid Syringoma

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Abstract: *Chondroid syringoma is a rare benign adnexal tumour of sweat gland origin, accounting for a very small proportion of primary cutaneous tumours¹. This report describes an unusual case presenting as an axillary swelling. A 43-year-old woman presented with a slowly enlarging axillary mass. Clinical examination, fine needle aspiration cytology, histopathology, and immunohistochemistry were performed. Histological evaluation showed epithelial and myoepithelial components within a chondromyxoid stroma, and immunohistochemistry demonstrated positivity for CK7, p63, and S100, confirming biphasic differentiation. The findings established the diagnosis of chondroid syringoma. This case highlights the importance of considering this rare entity in atypical anatomical locations and emphasizes the role of histopathology with immunohistochemistry in accurate diagnosis.*

Keywords: Chondroid syringoma, Axillary swelling, Adnexal tumour, Immunohistochemistry, Case report

1. Introduction

Chondroid syringoma is a rare benign mixed tumour of sweat glands. Due to its rarity at this site, it often poses a diagnostic challenge. It was first described in 1859 by Billroth as a tumour type similar to a benign mixed tumour of salivary glands² and later classified by Hirsch and Helwig as Chondroid syringoma in 1961³ due to the presence of both sweat gland elements and cartilaginous stroma. It accounts for 0.01–0.1% of primary skin tumours and typically arises in the head and neck region (80%) of middle-aged men⁴. The tumour is usually small, ranging from 1 mm to 5 cm in size. Occurrence in the axilla is extremely uncommon, and tumours exceeding 5 cm are rarely reported². This study aims to present a case of a large axillary chondroid syringoma in a middle-aged woman, highlighting its diagnostic challenges and clinical significance.

2. Case Report

A 43-year-old woman presented with a slowly enlarging swelling in the right axilla of five years' duration. On examination, a single, firm, mobile, lobulated, subcutaneous nodule measuring 9 × 5 cm was identified.

Fine-needle aspiration cytology revealed bland spindly cells, benign ductal epithelial cells and chondromyxoid stroma. Differential diagnoses included phyllodes tumour with myxoid stroma and chondroid syringoma.

The patient underwent an excision biopsy. Gross examination showed a firm, nodular mass measuring 8 × 7 × 6 cm. The cut surface was grey-white with translucent areas.

Histopathological examination revealed lobules of chondroid matrix with peripheral epithelial cells arranged in sheets, nests, and cords. Ducts were lined by an inner cuboidal layer and an outer myoepithelial layer.

Immunohistochemistry showed strong positivity for CK7 in luminal epithelial cells and strong positivity for p63 and S100 highlighting the myoepithelial component, confirming the biphasic differentiation characteristic of chondroid syringoma.

Based on morphology and immunohistochemical findings, a final diagnosis of **chondroid syringoma** was made.

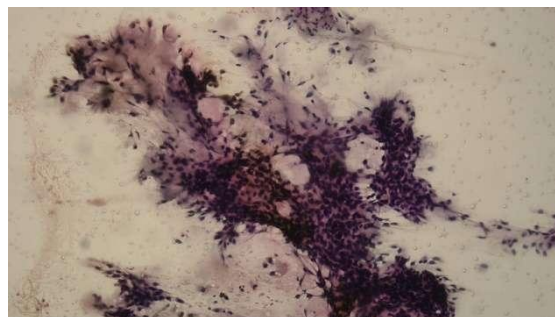


Figure 1: FNAC-Bland spindly cells and benign ductal epithelial cells in a background of chondromyxoid matrix (Pap stain 100X)



Figure 2: Gross: Firm, nodular mass measuring 8 × 7 × 6 cm. The cut surface was grey-white with translucent areas

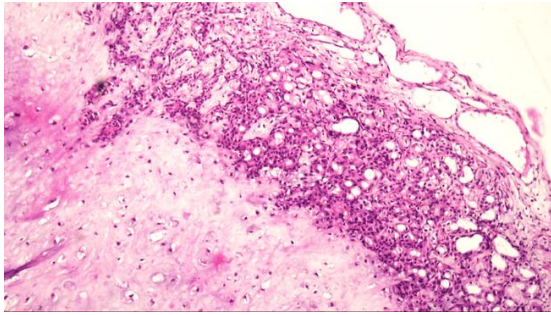


Figure 3: Lobules of chondroid matrix with periphery showing cells in sheet, nest, and tubules (H & E 100X)

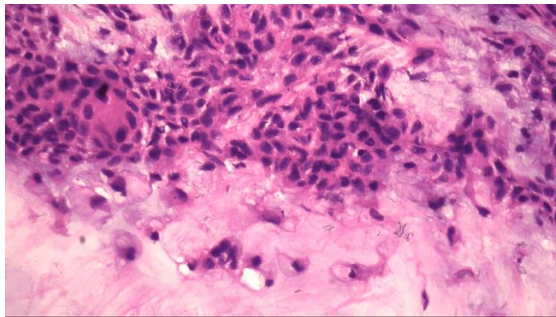


Figure 4: Ducts lined by inner cuboidal and outer myoepithelial layer (H & E 400X)

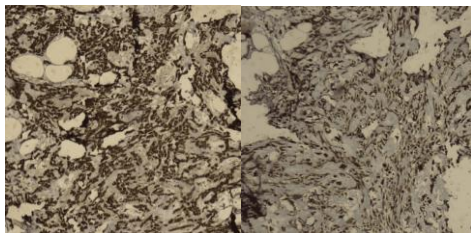


Figure 5: S100

Figure 6: CK7

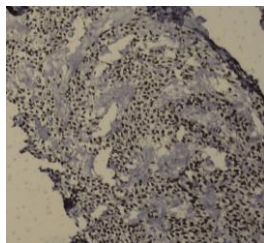


Figure 7: P63

3. Discussion

Chondroid syringoma is a rare adnexal tumor with dual epithelial and mesenchymal differentiation. Hirsch and Helwig outlined five histological criteria for diagnosis, including nests of cuboidal cells, tubuloalveolar structures, ductal structures, keratinous cysts, and a variable stromal matrix¹. WHO Classification of Skin Tumours has defined chondroid syringomas as benign adnexal tumours of skin composed of epithelial and stromal elements with a wide spectrum of patterns histologically analogous to mixed tumours of the salivary gland⁵.

Most cases occur in the head and neck region. Axillary involvement is exceptional, with only a few cases reported in the literature (Faten Limaiem et al., Hardisson et al.).

Tumours larger than 5 cm are rare; however, our case exceeded this size, making it noteworthy.

The most common misdiagnosis of CS is a salivary gland pleomorphic adenoma, which has the same clinical presentation⁶.

CS may be confused clinically with epidermal cyst, pilar cyst, calcifying epithelioma, or solitary trichoepithelioma⁷.

Immunohistochemistry serves as an adjunct to confirm epithelial and myoepithelial differentiation but is not a substitute for histomorphological assessment⁶.

Among the published literature on cytological features of chondroid syringomas, predominance of chondromyxoid elements and presence of only epithelial cell clusters have been more commonly reported⁸.

Excision is the treatment of choice. This should be followed by regular follow-up to look for local recurrence and features of malignancy. The recurrent lesions can be treated by surgical excision⁹.

Malignant transformation, though rare, has been reported. Cellular atypia, tumor necrosis, satellite nodules, infiltrative margins, and deep tissue involvement suggest malignant transformation¹⁰.

The present case is noteworthy due to its unusual axillary location and large size, both of which are rarely reported in the literature.

4. Conclusion

Chondroid syringoma is a rare adnexal tumour that may present in atypical locations such as the axilla and can attain large size. Accurate diagnosis relies on histopathological examination supported by immunohistochemistry. This case emphasizes the need to include chondroid syringoma in the differential diagnosis of persistent axillary swellings and highlights the importance of combined morphological and immunohistochemical assessment for definitive diagnosis.

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