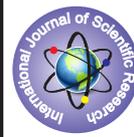


Chondroid syringoma of leg diagnosed by Fine Needle Aspiration Cytology



Pathology

KEYWORDS: Chondroid syringoma, Fine Needle Aspiration Cytology, leg

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ABSTRACT

Chondroid syringoma is commonly located at head and neck region and rarely in orbit, hand, forearm, foot, scrotum etc. It usually presents as asymptomatic mass often misdiagnosed clinically with other lesions like dermoid cyst, neurofibroma, dermatofibroma, pilomatixoma, cutaneous histiocytoma and seborrheic keratosis. Though histopathology is a gold standard, FNAC may suggest a diagnosis of Chondroid syringoma on the basis of thick mucoid aspirates showing distinct biphasic cell population of epithelial and myoepithelial cells in a fibrillary chondro-myxoid stroma. There are not many reported cases of Chondroid syringoma diagnosed cytologically. The present case is of a chondroid syringoma of lower third of right leg, which was primarily diagnosed by FNAC and later confirmed by histology. The present case emphasizes the cytodiagnosis of Chondroid syringoma and its rare location (right leg) for optimal patient management.

Introduction

Chondroid syringoma, also known as benign mixed tumour of skin is a relatively rare cutaneous adnexal tumour of eccrine and apocrine origin which is commonly located at head and neck region. It usually presents as asymptomatic mass. There are not many reported cases of Chondroid syringoma diagnosed cytologically¹. The present case reported is of chondroid syringoma, at a relatively rarer location of leg, which was primarily diagnosed by FNAC and later confirmed by histology.

Case Report

A 35 year old male patient presented with a slow growing mass in lateral aspect of lower one third of right leg for 3 months duration. The swelling was 5.5×4 cm in size, nodular, firm in consistency, mobile and attached to overlying skin. No ulceration or granulation seen. Radiograph showed homogenous soft tissue opacities without bony involvement. Clinically it was thought to be a benign mesenchymal lesion and sent for FNAC. 23 G needle with 10 ml syringe was used for the aspiration that yielded jelly like material. Both air dried and alcohol fixed smears were made and subjected to May Grunwald Giemsa (MGG) and Papanicolaou stains respectively. Microscopic examination showed cellular smear with clusters and sheets of epithelial cells with round nuclei and moderate amount of cytoplasm embedded in a chondromyxoid stromal material. Based on these findings a cytological diagnosis of chondroid syringoma was offered. The mass was resected and sent to the pathology department for histopathological examination.

Grossly the mass was greyish white in colour, nodular, firm, measuring 5.5×4×3 cm in size. Cut surface showed smooth greyish yellow in appearance with focal areas of haemorrhage. Representative sections were taken and Hematoxylin and Eosin stained smear showed tubulocystic structures lined by two layered cells, inner cuboidal and outer flattened layer surrounded by a basophilic mucoid stroma. Thus the histological features confirmed the cytological diagnosis of chondroid syringoma. (Figure 1)

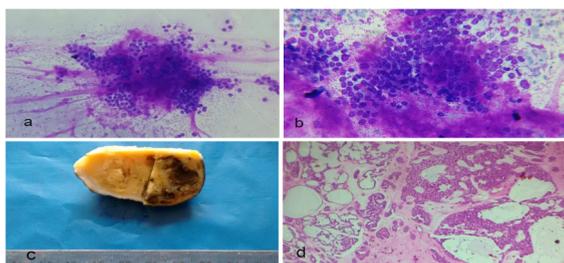


Figure 1 a,b,c,d [1a: Sheets of epithelial cells embedded in a chondromyxoid stromal material. (MGG,100X) ;1b: Epithelial cell round nuclei and moderate amount of cytoplasm (MGG,400X) ;1c: Greyish white colour mass, cut surface showing smooth greyish yellow in appearance with focal areas of haemorrhage ;1d: Tubulocystic structures lined by two layered cells, surrounded by a basophilic mucoid stroma (H&E,100X)]

Discussion

Bilroth in 1859 first described a mixed tumour with both epithelial and mesenchymal components which was of sweat gland origin. Hirsh and Helwig first coined the term chondroid syringoma¹. The incidence of chondroid syringoma is low 0.01-0.098 percent².

Chondroid syringoma usually presents in head and neck region although there are reports of cases in rarer locations like orbit, hand, forearm, foot, scrotum etc.^{3,4}. The present case was located in the lower third of right leg. Sulochona et al reported a similar case located on right leg of a female⁵.

Chondroid syringoma usually presents as non-tender, slow growing, intra cutaneous or subcutaneous mass. Like the present case, chondroid syringoma is most commonly presented in middle aged to older aged individuals with predilection towards male gender⁶. However chondroid syringoma has also been reported in children also⁷.

The aetiology of the tumour is unknown. Owing to its unremarkable clinical presentation it is often misdiagnosed clinically with other lesions with nodularity like dermoid cyst, neurofibroma, dermatofibroma, pilomatixoma, cutaneous histiocytoma and seborrheic keratosis¹.

Though histopathology is a gold standard, FNAC may suggest a diagnosis of chondroid syringoma on the basis of thick mucoid aspirates showing distinct biphasic cell population of epithelial and myoepithelial cells in a fibrillary chondro-myxoid stroma. However sometimes, when the aspirates lack distinct biphasic cell populations or show predominantly monophasic cells, it creates diagnostic difficulties on FNAC.⁸ The present case had both the biphasic elements.

Fine Needle Aspiration Cytology is also useful to determine benign and malignant Chondroid syringoma before excision thereby useful to optimise patient management. However, sometimes it is difficult, because of the overlapping cytological features⁹.

Hence, FNAC is recommended to establish benign nature of the neoplasm and to differentiate from other common nodular skin lesions such as epidermal cyst, neurofibroma, cutaneous benign fibrous histiocytoma, etc.¹⁰. Only a handful of cases have been published related to cytological diagnosis of chondroid syringoma. The present case emphasises the cytodiagnosis of chondroid syringoma and its rare location (right leg) for optimal patient management.

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