Case Report

Chondroid Syringoma of the Scrotum with Mix Inflammatory Infiltration

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Abstract

Chondroid syringoma consists of epithelial cells and mucinous stroma with mesenchymal cells. Although it is generally encountered at head and neck, we found a very rare chondroid syringoma at the scrotum. Also mix inflammatory infiltration within stroma of the tumor was detected.

A 59 years old man complained of a solid mass in the scrotum. We found 2.5 X 2.5 X 2 cm subcutaneous and mobile tumor in the left posterolateral scrotal area. It was well circumscribed, cystic, septate, yellowish white in color. Spindle shaped cells with eosinophilic cytoplasm and small round nuclei mostly with cystic dilatation and also branching were seen at microscopic examination. Ductal structures were found in some areas. There was mix inflammatory infiltration without atypical cytology around tumor cells within mucinous stroma.

Chondroid syringoma of the scrotum is very rare and eight cases were reported to our knowledge. We could not find any histologic interpretation regarding inflammatory infiltration within stroma of the tumor in literature.

Introduction

Chondroid syringoma is a rare benign mixed tumor of the sweat gland which consists of epithelial cells and mucinous stroma with mesenchymal cells. Primary locations are generally on the head and neck region, particularly cheek, nose or skin above the lip [1,2,3,4]. We present chondroid syringoma at the scrotum as a rare localization.

Case Report

A 59 years old man complained of a solid mass in the scrotum. He states that he had this mass for 15 years with no changes. Physical examination revealed a subcutaneous mobile, cystic mass in the left posterolateral scrotal area. The left spermatic cord and testis was palpable. Biochemically lactate dehydrogenase (LDH) levels were normal and serum tumor markers such as alpha fetoprotein (AFP), beta human chorionic gonadotropin (beta HCG) were negative.

Excisional biopsy was carried out for subcutaneous scrotal mass. Grossly, tumor was well circumscribed, cystic, septate and yellowish white in color. The dimensions of the mass measured as 2.5X 2.5X2 cm.

Spindle shaped cells with eosinophilic cytoplasm and small round nuclei mostly with cystic dilatation and also branching were seen at microscopic examination. Ductal structures were found in some areas. They were lined by two layers of epithelial cells. Abundant, mucoid and faintly basophilic stroma was seen around the tumor cells. Tumor cells did not show any cytological atypia and carcinomatous feature. There was mix inflammatory infiltration without atypical cytology around tumor cells within mucinous stroma. There wasn’t any inflammation at surface epithelium and stroma.

Hematologic results were normal. There was not found any abnormality to explain inflammatory infiltration at stroma of the tumor. So this morphologic structure was considered as a feature of the stroma. Tumor was well circumscribed from the peripheral stroma.

Discussion

Chondroid syringoma is rare tumor that incidence is reported less than 0.01% of primary skin tumors. Clinical presentation...
was not seen at follow up of any one of eight chondroid syringoma cases. We found eighth scrotal chondroid syringoma case in the literature. Present case was measured 25 mm in size and time for elective operation was 15 years.

Chondroid syringoma is mixed tumor of the sweat gland which are composed of both epithelial and mesenchymal components [2,3]. It was reported first time by Nasse in 1892 [5]. Hirsch and Helwing reported in 1961 that chondroid syringoma originates in the apocrine sweat glands, which consisted of both glandular elements and stroma [6]. They described histopathological characteristics of the tumor as nests of cuboidal, polygonal cells, tubule-alveolar structures, lined with two or more rows of cuboidal cells, ductal structures, keratinous cysts, a matrix of varying composition [6].

Chondroid syringoma shows well circumscribed, painless mass clinically. Histological characteristic of chondroid syringoma is mixed epithelial and mesenchymal elements, tubule and cord structures which consist of epithelial cells with two rows and myo-epithelial layer [7,8]. Tumor stroma has a myxoid or chondroid appearance [2]. Immunohistochemically study shows cytokeratin, vimentin, S100 protein positivity in of chondroid syringoma is painless, firm subcutaneous nodule, which measures 0.5-3 cm in diameter [2]. It is generally encountered at the head and neck region. Infrequently chondroid syringoma is seen on the hand, foot, axillary region, abdomen, penis, vulva and other sides [2]. Chondroid syringoma scrotum was described rarely in the literature. The last one was defined by Hidenobu et al. in 2008 [1]. Chondroid syringoma cases in the literature are not much, so the knowledge about clinical aspect of scrotal lesions is very limited. The tumors which described previously in literature constitute painless mass, average time for elective operation was 7.9 year; average size of tumors was 42 mm [1]. Recurrence
chondroid syringoma[2,7]. Immunohistochemically inner layer epithelial cells express cytokeratin, CEA, EMA, outer layer cells express vimentin, S100 protein. Tumor stroma is focal positive for cytokeratin, vimentin, S100 protein [2,7].

In our case there were tubular and ductal structures fitted with double lined cell layer within the mucinous stroma. Immunohistochemically inner epithelial tumor cells were positive for cytokeratin, outer layer of epithelial cells were positive for vimentin and S100 protein. Tumor stroma was focal positive for all three markers. Also mix inflammatory infiltration within stroma of the tumor was detected which includes lymphocytes, eosinophils and plasma cells. All of inflammatory cells were mature without atypia. There was no inflammatory infiltration either peripheral stroma or surface epithelium of the tumor. We couldn't find this histologic feature for chondroid syringoma in the literature. Biochemical and hematologic analysis of the patient were normal. We couldn’t found any etiologic factor to explain inflammatory infiltration of stroma of the tumor. So this morphologic structure was considered as a feature of the stroma of the tumor.

The differential diagnosis for scrotal chondroid syringoma includes other epidermal appendages tumors, both malign and benign and also lipomas, lymphangiomas, hemangiomas, neurofibromas, testis tumors and other scrotal masses [1,2]. Radiological event, biochemical analysis and other clinical features don’t help to diagnose to chondroid syringoma.

The diagnosis is made on histological examination. First treatment choice is complete excision with surgical margin for this tumor. Incomplete excision or incisional biopsy could increase the risk of recurrence [2]. In our case the mass totally excised. There was no relapse within one year follow up.

Although chondroid syringoma is a benign tumor, rare cases of malignant chondroid syringoma have been reported. Malignant forms are seen more frequently on the trunk and extremities and usually larger than 3 cm [2,9]. Cytological atypia, necrosis, infiltration into the surrounding tissue occur in malignant forms [9]. Chondroid syringoma must be follow regularly because of the risk of malignancy and recurrence [1,2,9].

CONCLUSION

Chondroid syringoma of the scrotum is very rare. However it should be considered as differential diagnosis when suspecting scrotal tumor. It should be remembered that we can see mix inflammatory infiltration within tumor stroma. It can be a specialty of the stroma of the tumor.

REFERENCES

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