CASE REPORT

Scrotal extraosseous chondroma: Case report of an exceedingly unusual presentation and review of the literature

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Abstract

We report an exceedingly rare case of scrotal extraosseous chondroma in a 63 year-old man that presented with a recently growing scrotal mass. The mass was excised and broke into three tan-white firm nodules ranging in size from 1.0 to 1.5 cm in greatest dimension. Histologic examination showed mature hyaline cartilage and the case was diagnosed as extraosseous chondroma. Except for those arising in the hands and feet, extraosseous chondromas are rare benign tumors that arise in tissue unrelated to bone. Only eight extraosseous chondromas have been reported in the pelvis, six of them in females, while both male cases have been in the prostate and testis. We present the third case of extraosseous chondromas in the male pelvis, first reported in the scrotum.

Key words

Chondroma, Cutaneous, Testis, Teratoma

1 Introduction

Extraosseous chondromas are exceedingly rare benign tumors that arise in tissue unrelated to bone, except for those arising in the hands and feet of middle-aged adults where they are common [1]. Only eight extraosseous chondromas have been reported in the pelvis, six of them in females, while both male cases have been in the prostate and testis [2-9]. We report an exceedingly rare case of scrotal extraosseous chondroma.

2 Case report

A 63 year old middle-eastern man presented with a slowly enlarging and bothersome superficial scrotal mass that had been present for several years but had grown more rapidly in size in the six months prior to evaluation and was causing pain and discomfort while sitting. The overlying skin had intermittently bled. Past medical history was significant for erythema nodosum and gout. The patient was consented for and underwent surgical excision. The mass was found to be freely mobile and just underneath the skin in the right anterior hemiscrotum. Both testes and epididymis were normal without mass. A transverse incision across the mass was made sharply in the right hemiscrotum. The mass was dissected out with

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electrocautery and was delivered intact, however then broke into three firm, pearly white pieces which were submitted for pathologic examination. The dartos layer was not entered as the mass was very superficial and non-adherent to the surrounding tissue.

Gross pathologic examination revealed 3 tan-white firm nodules ranging in size from 1.0 to 1.5 cm in greatest dimension. The cut surface was smooth. Histologic examination showed mature hyaline cartilage, areas of calcification as well as rare peripheral bone trabeculae (see Figure 1A-B). Mitosis, cytologic atypia or other features of malignancy were not identified. The case was diagnosed as extraosseous chondroma. Our patient has been disease free 6 months after surgical excision.

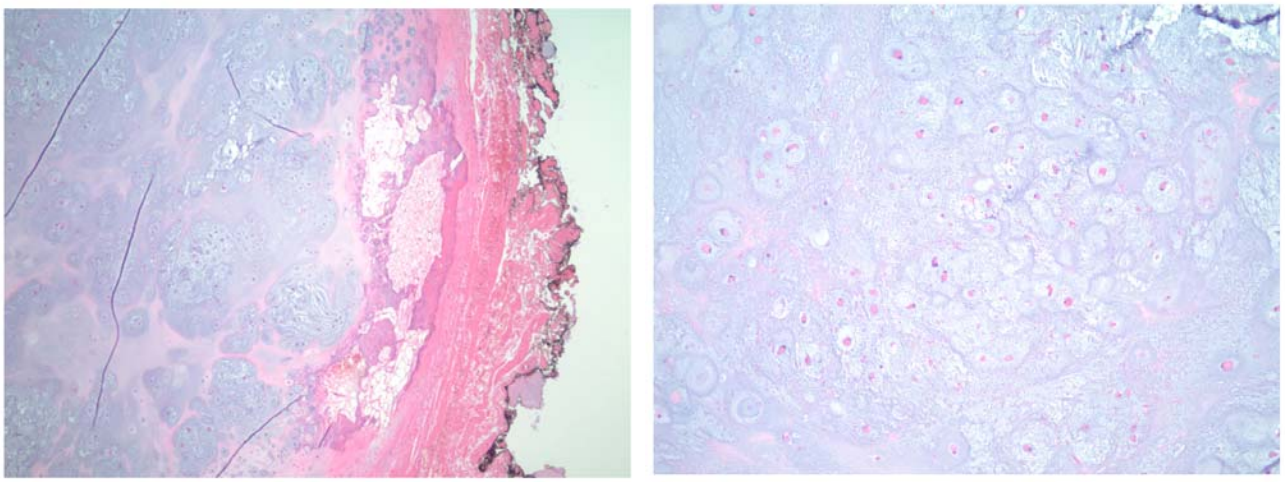

Figure 1. A. Low-power of scrotal chondroma with rim of bone trabeculae. H&E 20× (Left). B. High-power demonstrating chondroid matrix; chondrocytes with uniform shape and size in a chondroid stroma. H&E 200× (Right).

3 Discussion

Extraosseous chondromas are benign tumors that arise in tissue unrelated to the bone. They are rare, except of those arising in the hands and feet of middle-aged adults [1]. A literature review revealed only eight extraosseous chondromas in the pelvic region, six of them in females [2-9]. Two of these cases were reported in the urinary bladder, in 62 and 63 year-old patients with submucosal solid masses, composed of mature cartilage [2-3]. Three young patients had fallopian tube lesions; a 32 year-old patient, 30 year-old woman with 3cm×2 cm nodular mass noted on the left tubal serosal area, a 31 year-old patient with 1.6 cm subserosal nodule detected in an elective tubal ligation; contralateral tube was normal [4-6]. In Brazil, an 11-year-old girl was referred for a painless solid tumor located on the mons pubis that was diagnosed as chondroma that could be considered a case of chondroma cutis [7].

One case of prostatic chondroma was reported in a 74 year-old man with benign hyperplasia symptoms after transurethral resection [8]. Another case has been reported in the male pelvis; however, this case arose in the testis in a 29 year-old man and the author suggested it could be an example of pure cartilaginous teratoma [9].

To our knowledge, no prior cases of chondromas in the scrotal skin have been reported. The clinical differential diagnosis of a scrotal mass includes benign and malignant lesions, such as sebaceous or epidermoid cysts, median raphe cysts, mesothelioma of the tunica vaginalis, scrotal wall or para-testicular tumors and extensions of other intra-scrotal pathologic lesions or tumors including well-differentiated/dedifferentiated liposarcoma that regularly occurs in this region as extension of the retroperitoneum along the tunica vaginalis. Extraosseous chondromas are generally benign with the rare possibility of malignant transformation. The treatment is by surgical resection with clear margins since these tumors are

not known to regress. Local recurrences can occur but distant metastases have not been reported. We present the second case of extraosseous chondroma in the male pelvic area, first involving the scrotum.

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