Unusual Presentation of a Rare Para Testicular Tumour in a Child

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Abstract
Adenomatoid tumour epididymis usually present as painless scrotal mass during 2nd or 3rd decade of life. The case presented is a seven years old boy admitted with acute painful swelling of the scrotum. The scrotum was explored on the suspicion of torsion testis but testis was found to be normal and the epididymis enlarged. Biopsy from epididymis showed Adenomatoid tumour. Surgical exploration was performed through the same inguinal incision later and tissue sent for histopathological examination confirmed “adenomatoid tumour with surrounding inflammatory mass”.

Key Words
Adenomatoid tumour, Epididymis, Torsion

Introduction
Tumours of Epididymis are very rare comprise less than 5% of all intrascrotal tumors (1) and approximately 30% of all paratesticular tumors (2). Adenomatoid Tumour is a benign, slow growing tumour. Although adenomatoid tumors most commonly affect men 20 years old or older but may affect patients of any age as in our case of 7 years old boy. Patients are generally asymptomatic, and only 5% of patients present with acute onset of inflammation and pain, (3) a finding that suggests epididymitis which is an important differential diagnosis. (4). The histogenesis of adenomatoid tumour is controversial. These tumours are unencapsulated, cells have cytoplasmic vaeoules. Surgical excision is recommended for these lesions. Local excision (Testis sparing surgery) is considered sufficient by some. We present a rare para testicular tumour with unusual presentation in a child as a histological surprise.

Case Report
A 7 years old boy presented with painful swelling of the scrotum which was present for the last one month but the parents reported about the swelling only when it started developing pain six hours before admission, sudden in onset, continuous, moderate in intensity with no radiation. On examination right side of scrotum was enlarged and the skin was reddened. A swelling of 3 x 3 cm size, firm to hard in consistency, tender to touch could be felt vaguely in the right compartment of scrotum. Spermatic cord was thickened. Testis could not be palpated separately from the swelling. The scrotum was explored and testis was found to be inseparable and smudged together with epididymis. Epididymis was enlarged, edematous and thickened. Biopsy was taken from globus major as frozen section facility was not available. Histopathological examination showed adenomatoid tumour. Surgical exploration was performed through the same inguinal incision later and tissue sent for histopathological examination confirmed adenomatoid tumour with surrounding inflammatory mass.

Discussion
Tumours of epididymis both primary and secondary, whether benign or malignant are very rare. Adenomatoid tumour is a benign, slow growing tumour which mostly involves spermatic cord, ejaculatory ducts, fallopian tubes uterus, intratesticular, prostate and suprarenal areas (5, 6, 7, 8). These account for approximately 30% of all primary testicular tumours. Adenomatoid tumour of epididymis mostly involve polar region with a higher incidence in the lower pole (4:1). Mostly these tumors...
Fig 1. Intraoperative Findings Showing Enlarged Epididymis & Thickened Spermatic Cord as Single Mass with Testis

Fig 2. High power view of Adenomatoid Tumour of Epididymis (X 40)

occur in 2nd or 3rd decade (9) but may present at any age as in our case, usually unilateral, more common on the left side, clinically presents as small, solid, asymptomatic rounded discrete masses, may be with mild pain or discomfort with long history without obvious change in size but it may also present as acute emergency with pain, due to inflammation suggesting epididymitis, (10) mimicking as torsion in our case. On gross examination these tumours are small ranging from 0.4 to 5 cm. (Fig.1) The histogenesis of adenomatoid tumour is controversial. Some pathologists consider it to be a reaction to injury or inflammation (11). Most recent reports have favoured a mesothelial origin which is based on ultrastructural and immunohistochemical findings. These tumours are unencapsulated, cells have cytoplasmic vacoules, (Fig 2) intervening stroma may have smooth muscles and elastin fibres, desmoplastic quality and inflammatory cells. On electron microscopy prominent microvilli, desmosomes and tonofilaments are seen (12).

Intrascrotal lesions provide a diagnostic challenge for physicians. Ultrasound aids in diagnosis in cases of uncertainty. Specific CT and MRI findings with respect to tumour location, morphologic features and tissue characteristics can aid in the evaluation of para testicular tumours and help narrow the differential diagnosis. Surgical excision is recommended for these lesions (13). These tumours have a long history and absence of distant metastasis. Surgical exploration was performed in this case as the patient was very young and belongs to a remote village that is less reliable for regular follow up (14). Local excision (Testis sparing surgery) is considered sufficient by some because there has been no reported recurrence so far (15, 16).

Conclusion
A high degree of clinical/histopathological suspicion is needed as para testicular tumor can present with usual presentation and with histopathological surprise.

References