

Adenomatoid Tumor of Epididymis:

A Case Report with Correlation between Histology and FNAC.

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Abstract: Adenomatoid tumor is a rare and distinctive, benign mesothelial neoplasm of the paratesticular region in males, most commonly occurring at the tail of epididymis and constitutes 30% of paratesticular neoplasms. We present a case of adenomatoid tumor in a 35 year old male, who presented with a mass in right epididymis and was diagnosed by fine needle aspiration cytology and later confirmed on histopathology. The clinical, histopathological and cytological aspects of this rare case are discussed. FNAC plays a pivotal role in the preoperative diagnosis of these tumors as it is a simple, inexpensive, minimally invasive and reliable diagnostic modality. Due to its benign nature, the treatment of choice is local excision. We believe it is important for the clinician to be aware of this interesting entity in order to make an accurate diagnosis and prevent unnecessary orchiectomy.

INTRODUCTION

Adenomatoid tumor is a rare and benign neoplasm of mesothelial origin seen in male as well as female genital tract along with extragenital sites, but is more common in male adnexa. It is seen usually in the 3rd & 4th decades (mean age is 36 yrs)¹. Adenomatoid tumor was first described in 1945 by Golden and Ash as a small firm asymptomatic intrascrotal mass, with no pain or tenderness, occurring in third to fifth decades of life. These tumors represent 30% of the paratesticular tumors². Beccia *et al* studied 314 epididymal tumors, of which 75% were benign and 73% of those were diagnosed as adenomatoid tumors, followed by leiomyomas (11%), and papillary cystadenomas (9%). These tumors are benign in nature (even when they infiltrate into the adjacent sites), with no reported cases of malignant change, metastasis, or relapse after removal, and tumor excision is therefore the treatment of choice¹. Accurate diagnosis is the key to prevent unnecessary orchiectomy³.

CASE REPORT

A 35 year old male presented at the Urology OPD of our hospital with 1 year history of a slowly enlarging and painless right sided scrotal mass (felt at the lower pole of epididymis) which was nontender, non fluctuant and non transilluminant on local examination. Personal and family history was unremarkable; without epididymitis, torsion or trauma. Aspiration from the mass was done using a 10 ml syringe and 24G needle to obtain a scanty, whitish aspirate. FNAC from the mass revealed moderately cellular smears composed of monomorphic, round to oval tumor cells arranged in sheets and multilayered clusters. The cells were round to oval with pale vacuolated cytoplasm, eccentric nucleus having fine chromatin and small, central nucleolus within a background of naked nuclei and stromal bits (Fig 1). A cytological diagnosis of adenomatoid tumor was made; following which the patient underwent a conservative testis sparing surgery with the excision of epididymal nodule. The nodule measured 1.5x1.3cm in diameter and it was grayish-white on cut section (Fig 2a). The mass was sent to us for histopathological evaluation. Histopathological examination revealed characteristic features of adenomatoid tumor with tubules and cords of cuboidal cells having large intracytoplasmic vacuoles and gaping spaces (Fig 2b). The cellular vacuoles had a signet ring-like appearance in some fields. There was no mitotic activity. Prominent lymphoid collections were seen in a fibroblastic stroma, which is another important clue to the diagnosis. This tumor was diagnosed as an adenomatoid tumor and the patient underwent no additional treatment.

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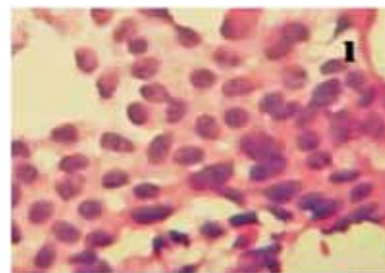


Figure 1: FNAC smear showing monolayered sheet of monomorphic cells with pale, vacuolated cytoplasm (H&E x Oil)



Figure 2a: Cut section of tumor nodule

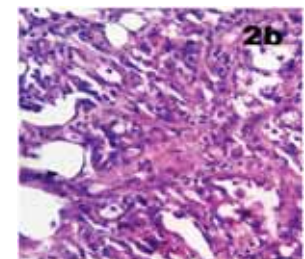


Figure 2b: Adenomatoid tumor with gaping spaces and cuboidal cells, with vacuolated cytoplasm (H&E xMP)

DISCUSSION

Most Adenomatoid tumors are asymptomatic masses found accidentally by the patient or by the physician on physical examination and, generally remain unchanged in size for years. In males they occur in the epididymis, spermatic cord, prostate and ejaculatory duct. Mostly they arise at the lower pole of the epididymis (as seen in the present case). In females they are found in uterus, fallopian tubes and ovarian hilus¹. They are also seen in extragenital sites like adrenal gland, lymph nodes, mediastinum, pleura, pancreas and heart.

They usually present as small (~2cm), solid, firm masses and on cut section, they appear grayish-white & homogeneous (the excised nodule in the present case also had solid, homogeneous cut surface). Occasionally, small cysts may be seen. These tumors are usually well circumscribed but non-encapsulated. They have a plethora of microscopic appearances, represented by four basic patterns: adenomatoid (tubular), angiomatoid (canalicular), plexiform (solid nests) and cystic (mixed). Cells are cuboidal to