ADENOMATOID TUMOR OF UTERUS - A CASE REPORT

UMA SAMUNDEESWARI
Department of Pathology,
THANJAVUR MEDICAL COLLEGE

Abstract : Adenomatoid tumor represents a rare type of genital tract tumor characterized by its benign behaviour. We reported a case of adenomatoid tumour in a 32 years old female who presented with menorrhagia. Histopathological examination and immunohistochemistry were used to confirm the diagnosis.

Key word :Adenomatoid tumor, hysterectomy, IHC

INTRODUCTION:
Adenomatoid tumor is a relatively rare benign neoplasm which usually arises in the genital tract[1,2]. The tumor is more frequently observed in the male genital tract such as the epididymis, spermatic cord, prostate & ejaculatory duct[1,3,4]. It also appears in the female genital tract more commonly in the fallopian tube followed by uterus and ovaries.[1] Rarely these tumors may originate in extragenital sites such as the adrenal gland, omentum , mesentry, pleura & peritoneum. [1,5]. Adenomatoid tumor have been observed in women between 30—72 years of the age (median 42 years). It is found in 0.1%--1.5% of women, who are hysterectomized for other reasons. Most adenomatoid tumors are localized and usually small incidental tumors, but large lesions have also been reported[5] as in our case. We reported a case of adenomatoid tumour of uterus in a 32 years female who presented with menorrhagia. HPE and IHC proved the diagnosis of the same.

CASE HISTORY:
32 years old female presented to the obstetrics and gynaecology department with the complaints of menorrhagia for 1 year duration. Ultrasonographic study of the pelvis revealed a heterogenous mass with focal cystic area and calcification in the uterus. The diagnosis was given as fibroid as per the imaging studies. Hysterectomy was performed and the specimen was sent to pathology department.

GROSS EXAMINATION
Gross examination of the specimen revealed a uterus with cervix measuring 8X5X3cm with attached one side tube measuring 3 cm and ovary measuring 3x2x1 cm. Cut section of uterus, ovary and fallopian tube appear to be normal. There was a grey white, globular mass measuring 6x4x3cm attached to the cornua on one side of the uterus. On external surface the mass appears to be encapsulated. Cut surface of the mass revealed a gritty yellow area with vague nodularity and areas of cystic degeneration. No areas of hemorrhage & necrosis were noticed.

MICROSCOPIC FEATURES:
The microscopic features revealed a benign tumor composed of gland like spaces and luminal spaces lined with flat, cuboidal to low columnar cells, intermingled with fibroblasts . Some areas show vacuolated cells with no nuclear atypia or mitotic figures, thus differentiating it from invasive adenocarcinoma. Final diagnosis made was adenoid variant of adenomatoid tumour.
DISCUSSION:
The incidence of adenomatoid tumor in the uterus has been reported to be 1.2% [1]. However, true incidence is probably greater as these tumors frequently go unsampled because of their small size and gross appearance which is similar to leiomyomas[1,6,10]. Most adenomatoid tumors are located subserosally in the posterior wall of the fundus near the cornua [1,6]. Almost all adenomatoid tumors of uterus are solitary, small and solid but multiple, multinodular, diffuse and large cystic lesions have been described, particularly in uterus[5]. Cytological atypia and mitosis are typically absent. In uterus they are often associated with smooth muscle hypertrophy, whereas extraterine forms frequently contain intermingled fibroblastic tissue[5]. Grossly, they are usually nodular resembling leiomyomas, except they are less well circumscribed than leiomyomas. Their microscopic features are diverse. Four distinctive histological types are identified and those are adenoid, angiomatoid, solid and cystic[1,3]. The most frequent patterns are the adenoid and the angiomatoid type. The cystic type is very rare. The combination of two or more patterns may occur in one tumor. To date, no recurrence or malignant transformation have been reported in adenomatoid tumors. Therefore, the recommended treatment is simple excision, which completely cures[2,5]. Since the discovery of adenomatoid tumor, their histogenetic origin has been debated[1,5]. Mesonephric, mullerian, endothelial and mesothelial origins have been suggested. Previous studies based on transmission electron microscopy, scanning electron microscopy and immunohistochemistry support a mesothelial origin. Immunohistochemical analysis exhibited strong and diffuse positivity for calretinin, cytokeratin, vimentin and HBME1, thus confirming mesothelial histogenesis[7,8,9].

DIFFERENTIAL DIAGNOSIS:
Lymphangiomma - shows dilated thin walled lymphatic channels lined by bland endothelial cells, and the lumen filled with proteinaceous lymph with variable number of lymphocytes in the lumen & in stroma.

Epithelioid hemangioendothelioma - composed of solid nests of spindle endothelial cells. The tumor cells are uniform with bland nuclei, have intracytoplasmic vacuoles, that blister the cell. Staining for factor VIII & CD31 is positive.

Invasive adenocarcinoma - shows features of nuclear atypia and abnormal mitosis.
SUMMARY:

Adenomatoid tumor of uterus is a rare benign tumor, composed of luminal spaces lined by cuboidal to columnar epithelial cells without any nuclear atypia and mitosis. IHC with calretinin confirms its mesothelial origin. It has got excellent prognosis with surgical excision.

BIBLIOGRAPHY


2. Blaustin pathology of the female genital tract.


7. Rosai and Ackerman’s surgical pathology.


10. WHO—Tumors of female genital tract.