Case Report

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Adenofibroma of Cervix: An Unusual Presentation

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Abstract

Papillary Adenofibroma is an extremely rare condition and is benign biphasic tumor composed of epithelial and mesenchymal components. It occurs more often in extra uterine sites and in the female genital tract it is known to occur more common in the endometrium. The presence of this condition in cervical region is extremely rare and even the available cases show young to middle age predilection.

In the present case report we had a sixty year old post menopausal female who came with the complaints of bleeding per vaginum for five days and complaints of burning micturition with a provisional diagnosis of endocervical polyp clinically.

Radiologically imaging was suggestive of papillary neoplasm.

Biopsy studied showed features of lobulated papillae covered by bland endocervical epithelium with a foci showing squamous metaplasia features suggestive of benign papillary adenofibroma of cervix and reiterated with special stain as well.

It is a rare tumor having high chance of recurrence, with a very low incidence rate and account for less than 10% of uterine adenofibromas. Usually this condition presents as broad based polypoidal mass with abnormal vaginal bleeding. They need a differential diagnosis with Adenomyoma, Adenosarcoma and Carcinosarcoma which share many common features on histology.

Keywords: Adenofibroma; Cervix; Papillary lesions; Histopathology.

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INTRODUCTION

Adenofibroma of cervix is a rare benign biphasic tumor composed of epithelial and mesenchymal components and more commonly seen in extra uterine site like breast, liver and can also occur in the female genital tract, the most common location being endometrium.[1] Abnormal uterine bleeding being usual clinical manifestation, the condition is known to present with many

unusual clinical perspectives. With respect to uterine location, they tend to have confounding presentation since they manifest as broad based polypoidal mass protruding into the endocervical canal.[2]

Literature states that adenofibroma especially genital tract could be ruled out only by comprehensive evaluation.

It has a very low incidence rate that accounts for less than 10% of uterine adenofibromas and only less than 1% seen in cervix.[34] These Adenofibromas can be seen in women of younger age group but known to be very rare in peri-menopausal or postmenopausal women.[4]

These tumors present as polypoid lesions that protrude into the endocervical canal and can vary in size from 0.5 to 14 cms in dimension[5] mimicking malignancy on clinical examination. Histologically, these tumors are benign biphasic neoplasms exhibiting a papillary architecture with fronds lined by cuboidal, columnar, mucinous, or ciliated glandular epithelium.[6] The stromal component is also benign, appearing with minimal cytologic atypia and mitotic activity. These tumours though known to have a benign course from the pathologist perspective it needs to be differentiated from an adenomyoma and adenosarcoma.[6] These tumors previously classified as adenofibromas may potentially be in fact well differentiated adenosarcomas, is a main reason of concern to monitor for recurrence and very rarely metastasize.[7]

CASE REPORT

The present case report is sixty year old postmenopausal female P3L3/SVD presented with the complaints of bleeding per vaginum for 5 days duration accompanied with burning micturition. No other significant history was elicited except for sterilization procedure 35 years back and ovarian cystectomy underwent couple of decades back.

On examination, per abdomen was soft, non-tender, abdominal obesity was present with a healthy supra-pubic midline scar.

On per speculum examination, a polypoidal projection with a stalk measuring 5x3 cms arising from the os was absorbed.

On trans vaginal ultrasonography, Uterus was retroverted and measuring 5.7x3.7x4.2 cms. A growth measuring 4x1.8 cms arising from cervix seen suggestive of neoplastic origin. Bilateral ovaries were not visualised. Endometrial thickness measuring at 7mm.

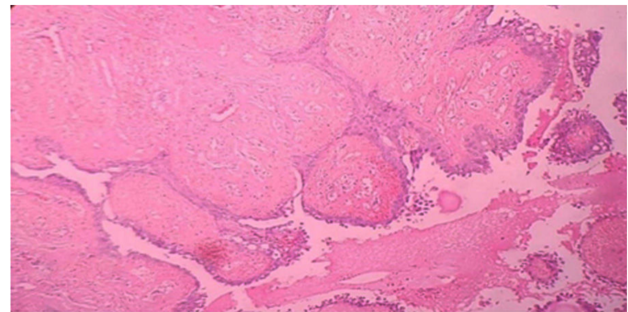
Based on comprehensive evaluation, the clinical impression was noted as endocervical polyp.

The patient underwent hysterectomy and the sample was directed for histopathological evaluation.

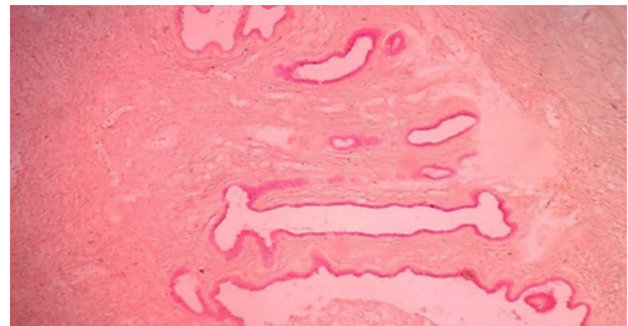
Pathological findings

Grossly, the sample was a single grey white soft tissue mass measuring at 2x1.5x0.3cms. External surface showed areas of congestion and cut surface showing grey black areas.

Histologically, showed lobulated papillae covered by bland endocervical epithelium. Few foci shows squamous metaplasia and surrounding dense stroma shows scattered endocervical glands, chronic inflammatory infiltrate, congested blood vessels and hemorrhage. Mucicarmine was done to rule out the possibility of mullerian papilloma.



Lobulated Papillae with bland endocervical epithelium with a focus showing Squamous metaplasia (H&E, 4X)



Mucicarmine stain showing positivity in cytoplasm of glandular lining (10X)

DISCUSSION

The term cervical adenofibroma was first reported by Abell in 1971.[14] It is a rare benign biphasic tumour composed of epithelial and mesenchymal components. It is very crucial to distinguish adenofibromas from adenosarcomas and adenomyomas. The hypercellular

periglandular stroma that characterizes and specific for adenosarcoma is usually not reflected in adenofibromas.[23] Stromal cell atypia is generally absent or mild and markedly atypical mesenchymal cells are not present. Mitotic figures are rare. Adenosarcoma is diagnosed if the stroma shows atypia, increased periglandular stromal cells, invasiveness and mitotic figures ≥4/10 high power fields, wherein the histo-pathological morphology of adenomyoma is characterized by the tumour stroma being smooth muscle.[45] Cervical adenosarcoma and adenofibroma share very similar histomorphology and the two differ mainly in the stromal component making a close confounder.[6]

Total hysterectomy is the most preferred treatment for an adenofibroma because the neoplasm has a high chance of recurrence and is also known to invade myometrium, pelvic veins and metastasize if it undergoes sarcomatous change.[67]

Critical Appraisal

Adenofibroma being an unusual biphasic tumor, its presence in cervix is a rare phenomenon encompassing many differentials. The present case report, the diagnosis was reiterated only on meticulous histological evaluation with application of special stain making the case unique.

CONCLUSION

Adenofibroma should be considered as one of the differentials by the pathologists when encountering uterine polyps, especially when confounded with mimickers of adenosarcoma. This condition is known to occur in any age group with varied clinical presentation. Special stains for mucin should always be implied when encountering an unusual papillary architecture in cervix.

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