Case Report

Papillary Squamotransitional Cell Carcinoma of Uterine Cervix- An Uncommon Histopathological Variant

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ABSTRACT

A 45 years female having complaints of blood tinged per vaginal discharge of 6 month duration. On per vaginal examination showed growth at the cervix which bleed on touch. Papanicolaou cervical smear study revealed positive for malignant cells. On histopathology reported as Papillary Squamo-Transitional cell carcinoma of cervix. We are presenting this case of rare variant of squamous cell carcinoma of cervix (PSCC) for its clinical and histopathological features, as it is diagnostically challenging to differentiate from others cervical lesions.

Conclusion: PSCC is a rare histological subtype of squamous cell carcinoma of cervix. A high index of suspicion and awareness by clinician and pathologist are required to make accurate diagnosis in papillary lesion of cervix.

Key words: Cervical cancer, Papillary tumor, Transitional cell carcinoma.

INTRODUCTION

Papillary carcinoma of uterine cervix with transitional or squamous differentiation is rare tumors that often resemble transitional cell carcinoma of urinary track. Whether papillary carcinoma of cervix represent two (squamous and transitional) clinicopathological distinct group of tumor or single entity that remains unclear. The study report by Koenig et al.[¹] divided these tumors into predominantly squamous, predominantly transitional and mixed squamous and transitional on their histological appearance. We are presenting here with a case of rare variant of squamous cell carcinoma of cervix- Papillary Squamo-transitional Cell Carcinoma (PSCC) for its clinical and histopathological features, as it is diagnostically challenging to differentiate from others.

CASE REPORT

A 45 year female came to gynecology outdoor patient department with complaints of blood tinged per vaginal discharge of 6 month duration. On per vaginal examination, revealed growth at the cervix which bleed on touch. Ultrasonographic findings showed uterus with cervix measuring 6.0 x 4.4 x 3.6 cm, A well defined round to oval heteroechoic predominantly hypoechoic lesion arising from cervix measuring 1.8 x 1.2 x 0.6 cm was noted. The lesion showed increased vascularity and areas of calcification on peripherery. Ultrasonography was suggestive of cervical malignant lesion. No regional lymphadenopathy noted. Other pelvic organ showed no significant abnormality. X ray chest and abdominal MRI did not reveal any significant pathology. Papanicolaou cervical smear study revealed positive for malignant cells.
The cervical punch biopsy was done. On histopathological examination showed tumor arranged in papillary pattern with central fibrovascular core. Papillae lined by multilayered neoplastic cells which are transitional cells showing atypical nuclear pleomorphism. At places areas of necrosis, few keratin pearls are noted. Increased mitotic activity was evident. Tumor invasion was noted at base of the papillae. On histopathology reported as papillary squamo-transitional cell carcinoma of cervix (fig 1, 2, 3).

DISCUSSION
Papillary Squamo-transitional Cell Carcinoma (PSCC) of the uterine cervix is a distinct clinicopathological subtype of cervical cancer. It differs by histology and clinical behaviour from conventional squamous cell carcinoma. Its incidence has been reported to be 1.6% of cervical carcinoma. In 1986, Randall et al characterized these tumors as papillary squamous cell carcinoma. The various other sites are also been reported for its occurrence are at vagina and endometrium. The age of presentation of these cases of PSCC are ranged from 35 to 75 years. Clinically present with signs and symptoms of per vaginal bleeding, metrorrhagia, abdominal pain.

On gross examination, appears as papillary wart like exophytic growth. On colposcopic selective biopsy of the cervical growth, it is not easily diagnosed. So many times evaluation of the entire tumor growth in hysterectomy specimen is required. Stromal invasion usually noted at area of tumor growth but it may be seen within fibrovascular core.

On ultrasonography it is seen as a well-defined round to oval heteroechoic predominantly hypoechoic lesion arising from cervix. Sometimes shows increased vascularity and areas of calcification on periphery. The tumor was extending into cervical wall and has a stage I-A as per International Federation of Gynecology-Obstetrics Staging system (FIGO).

On histopathological examination tumor showed papillary architecture with fibro-vascular core and focal stromal invasion (Haematoxyline and eosisin stain, 100x).

Ng WK suggested that papillary tumor should be diagnosed only if papillary or anastomosing front like architectural pattern was seen > 70% of the tumor.
Various lesions which should be differentiated from PSCC are condylomata, warty squamous cell carcinoma, squamous papilloma, verrucous carcinoma, cervical intraepithelial neoplasia with papillary configuration, transitional cell carcinoma endometrial adenocarcinoma and villoglandular papillary adenocarcinoma cervix. [1,9,10]

The histopathological finding with immunohistochemistry study for CK7 which is positive and CK 20 which is usually negative and prognostic markers like Ki 67 and p 53 will help to distinguish PSCC from other papillary lesions of cervix. [2,4]

PSCC have a tendency for late recurrence and late metastasis so careful evaluation of these patients is essential part of management. [1,10]

Our patient received treatment of radical hysterectomy, the post-operative period was uneventful. PSCC treated with same therapeutic approach as non-papillary SCC. [2]

CONCLUSION
PSCC is a rare histological subtype of SCC. A high index of suspicion and awareness by clinician and pathologist are required to make accurate diagnosis in papillary lesion of cervix.

REFERENCES
8. Ng WK. Thin-layer (liquid-based) cytologic findings of papillary squamotransitional cell carcinoma of the cervix. Review of cases over a 4-year period with emphasis on potential diagnostic pitfalls Acta Cytol. 2003;47(2):141-8.


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