A Case Report On Papillary Squamous Cell (Transitional) Carcinoma of Cervix

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Papillary squamous cell carcinoma is a rare and distinctive variant of squamous cell carcinoma of the uterine cervix, which differs by histology and clinical behaviour from conventional squamous cell carcinoma.^[1] Histologically, composed of papillary projections that are covered by several layers of atypical epithelial cells.^[2] We are reporting a case of 65 years old female who presented with complaint of post menopausal bleeding and foul-smelling vaginal discharge since 6 months. A cervical biopsy was Performed and the histopathological examination showed malignant tumor tissue in papillary arrangement with fibrovascular core. Case is reported because of its rare incidence and its importance to differentiate from other subtypes of invasive squamous cell carcinoma.

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I. Introduction

Papillary squamous cell carcinoma (PSCC) of the uterine cervix is a very rare variant and poorly documented subtype of squamous cell carcinoma (SCC). Its incidence has been reported to be 1.6% of cervical carcinomas^[3] Mostly patients present with abnormal vaginal bleeding. Other symptoms include offensive vaginal discharge and abdominal pain.^[4] Microscopically, papillary squamous cell carcinomas are composed of papillary projections that are covered by several layers of atypical epithelial cells. The cells have hyperchromatic, oval nuclei, and minimal amounts of cytoplasm. Mitoses are frequent. It is subdivided into three groups based on their histologic appearance: predominately squamous, predominantly transitional, and mixed squamous and transitional.^[2]

II. Case Report

A 65 years old female presented to Department of Obstetrics and Gynaecology, Rajindra Hospital, Government Medical College, Patiala with complaint of post menopausal bleeding and foul-smelling vaginal discharge since 6 months. Pap smear showed High-grade squamous intraepithelial lesion (HSIL) findings. The cervical biopsy was taken and specimen was sent to Department of Pathology, Rajindra Hospital, Government Medical College, Patiala. The Specimen was fixed in 10% formalin solution and subsequently embedded in paraffin wax. Sections were made and stained with H&E.

Gross

Received multiple creamish brown soft tissue pieces measuring 1.5x1.5cm in aggregate.

Microscopic features

Sections show malignant tumor tissue arranged in papillae with fibrovascular core and at places arranged in sheets. Papillae are lined by several layers of malignant epithelial cells. Cells are round to oval arranged perpendicular to surface. Cells have pleomorphic and hyperchromatic nuclei with increased nucleocytoplasmic ratio with variable amount of eosinophilic cytoplasm. Also seen areas of necrosis with infiltration by inflammatory cells. 4-5 mitotic figures/hpf are seen.

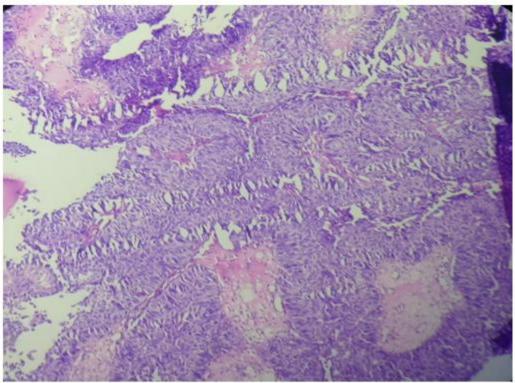


Fig 1: Multiple papillae with fibro-vascular core lined by several layers of atypical epithelial cells.

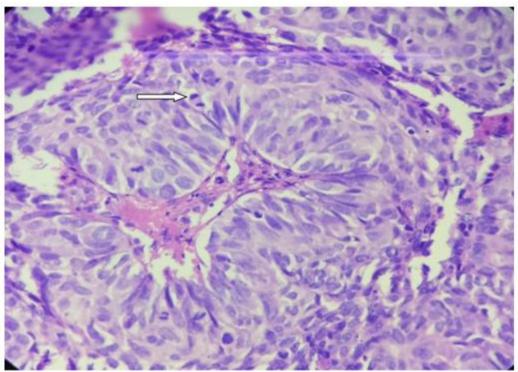


Fig 2 : Tumor cells showing atypia and mitosis (Arrow).

III. Discussion

Papillary squamous cell carcinoma of cervix is uncommon and have distinct histopathological features.^[1,3,5,6] More common in postmenopausal females and they present with postmenopausal bleeding.^[1,6,7] Although there is no definitive criteria for its diagnosis. Ng WK suggested that papillary tumours should be diagnosed only if papillary or anastomosing frond-like architectural pattern was seen in >70% of the tumour tissue.^[8] This tumor has propensity for late recurrences and late metastasis.^[3,6] Invasion may be difficult to

demonstrate histologically unless deep biopsies are obtained.^[3] Because papillary squamous cell carcinoma is capable of acting aggressively and metastasizing, it is important that a cone biopsy is performed to rule out invasion whenever a papillary squamous cell carcinoma in situ is diagnosed.^[2] Some studies suggest the association of papillary squamous cell carcinoma with HPV.^[9] Differential diagnosis include transitional cell tumors, squamous papilloma, verrucous carcinoma, papillary serous adenocarcinoma, and cervical intraepithelial neoplasia especially grade III with papillary features.^[5,10] All three variants of papillary squamous cell carcinoma are typically positive for cytokeratin 7 and negative for cytokeratin 20, which is a pattern more typical of cervical squamous lesions than of transitional cell tumors of the urinary tract.^[2] The papillae of papillary squamous cell carcinoma are lined by dysplastic cells, in contrast to verrucous carcinoma which are lined by cytologically benign epithelial cells.^[3]

IV. Conclusion

Papillary squamous cell carcinoma of cervix is uncommon and distinctive variant of squamous cell carcinoma of cervix. Because of its aggresive nature and its propensity for late recurrences and late metastasis, it must be distinguished from other subtypes of invasive squamous cell carcinoma.

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