

# Transitional Cell Carcinoma: A Case Report with Clinical, Histological and Cytological Findings

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## ABSTRACT

Papillary carcinoma of the uterine cervix with features reminiscent of Transitional Cell Carcinoma (TCC) of urothelial origin, is a poorly recognized subtype of cervical carcinoma. This tumour has a propensity for late metastasis and local recurrence, in spite of the fact that histologically it could be misinterpreted as CIN grade III with a papillary configuration or as a squamous cell papilloma. This tumour occurs mainly in post-menopausal females, it is potentially aggressive and it presents at a more advanced stage. Here, we are presenting a case of a 65-year-old female who presented with post-menopausal bleeding and pelvic pain, and underwent hysterectomy for pyometra. The cervix showed a focus of papillary transitional carcinoma.

**Keywords:** Transitional cell carcinoma, Cervix

## CASE REPORT

A 65-year-old lady presented with a history of post-menopausal bleeding and pelvic pain of 3 months duration. Past medical history was insignificant. There was no history of cancer of genito-urinary tract. Her general physical examination was within normal limits. On pelvic examination, uterus was found to be enlarged. USG revealed enlarged uterus with pyometra. A PAP smear was taken and the report was suggestive of an infiltrative neoplasm. An endometrial biopsy was done, followed by total abdominal hysterectomy with bilateral salpingo-oophorectomy. No grossly apparent tumour was seen on exploration of abdomen.

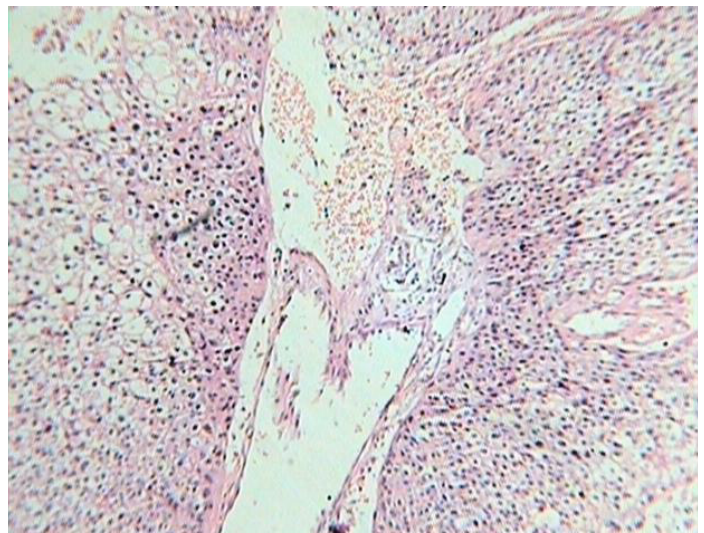
## PATHOLOGIC FINDINGS

Cervical smears revealed a background that was necrotic and haemorrhagic. Cells with transitional features formed cohesive groups in a multi-layered fashion and they were oval or spindle shaped, with tapered ends. Nuclei were hyperchromatic, with wrinkled membranes. Nucleoli were small or absent. Initially, the smears were reported as suggestive of an infiltrative malignancy. On retrospective analysis, the smears showed features of transitional cell carcinoma. The resected uterus was enlarged (12×7×7 cm). The endometrial cavity was dilated and it was filled with necrotic material and blood. Cervix showed a papillary growth extending into lower uterine segment. Microscopic examination of H and E stained sections from cervix revealed a tumour with papillary structures, with thin fibrovascular cores covered by ovoid cells with abundant eosinophilic cytoplasm, resembling urothelial epithelium. Stromal invasion was present. Cytokeratin profile was as follows: CK 7 positive, CK 20 negative. A diagnosis of TCC of cervix was made.

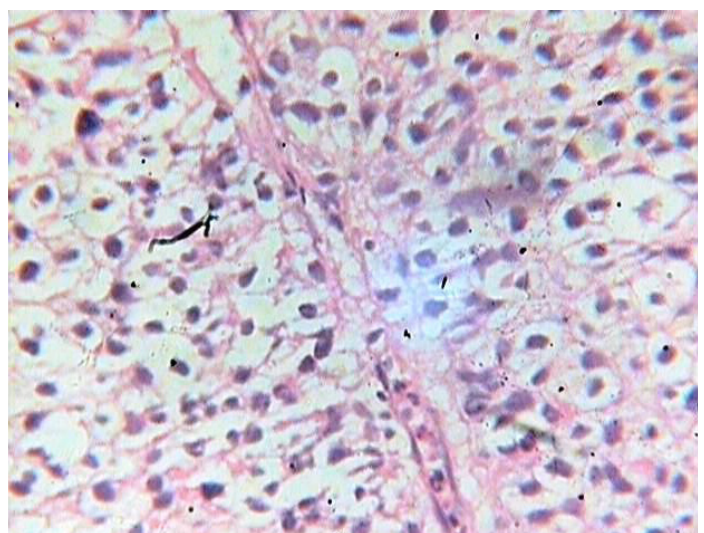
## DISCUSSION

Papillary carcinomas of uterine cervix are rare, which may show either a transitional, squamous or a mixed differentiation. Some tumours may show a purely transitional or squamous appearance. The above three categories should be retained, as there often is a subjective difference in deciding whether the tumour is transitional or squamous [1-3].

TCC of cervix is a rare neoplasm that probably represents a subgroup of SCC. Its occurrence at sites such as cervix, endometrium



**[Table/Fig-1]:** Low power view showing nests of transitional cells surrounding fibrovascular tissue (100X)



**[Table/Fig-2]:** High power view of the tumor cells (400X)

and ovaries has been described. Cervical epithelium which is known to undergo transitional metaplasia, may also give rise to benign and malignant transitional cell tumours. Aetiologic role of HPV 16 has been documented in a proportion of TCCs of cervix [4]. This tumour occurs mainly in post-menopausal females [5,6]. However, the age group affected ranges from 34 to 81 years. In our case, age at presentation was 65 years. Most common clinical presentation is post-menopausal bleeding and /or pelvic pain and abnormal Papanicolaou smears [2,3]. Similar complaints were noted at presentation in our patient. The most frequent histologic pattern is papillary exophytic, but it can be inverted-endophytic type also [4]. In our case, gross appearance of the tumour was papillary exophytic. Microscopically, transitional cell carcinomas of cervix are similar to those originating in urinary bladder or ovary [6,7] Cytokeratin profile is similar to that of SCC of cervix; positive for CK 7, negative for CK 20 [2]. Similar findings were seen in our case.

## CONCLUSION

Although it is a rare neoplasm, recognition of TCC of cervix is important to delineate its clinical and pathologic features and to

establish prognostic differences from those of other histologic types of cervical carcinomas.

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