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Pathology

ENDOMETRIOID CARCINOMA ENDOMETRIUM WITH SYNCHRONOUS NON KERATINISING SQUAMOUS CELL CARCINOMA CERVIX , HPV ASSOCIATED – THE TWIN MONSTERS

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ABSTRACT Synchronous primary genital cancers are rare, comprising 1-6% of all genital neoplasms and 0.8-1.7% of all malignancies. The most common combination consist of ovarian and endometrial carcinoma. Differentiation between the tumors is mainly based on Immunohistochemical (IHC) studies. Here we report a case of synchronous carcinoma of endometrium and cervix.

KEYWORDS : Synchronous carcinoma , Immunohistochemical studies

INTRODUCTION

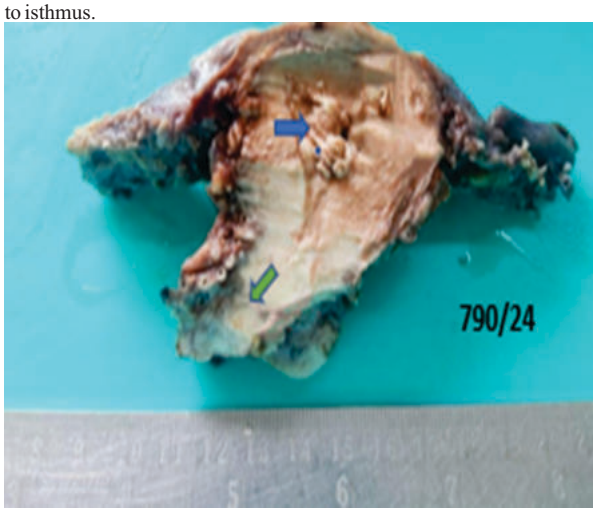
Multiple primary malignancies (MPM) or synchronous tumors have been first described in 1879 by Billroth . Etiology and pathogenesis of MPM remains unclear. We present a case of Endometriod carcinoma endometrium with synchronous non keratinizing squamous cell carcinoma-HPV associated, in the cervix, highliting its rarity, histopathology and clinical significance.

CASE PRESENTATION

55 year old female ,P2L2, presented with complaints of bleeding PV since 1 month. P/A & P/S examinations was normal .USG abdomen revealed bulky uterus and thickened endometrium(9.7mm). Cytology showed HSIL and D&C reported well differentiated endometrioid endometrial carcinoma .Total Laprocopic Hyserectomy + Bilateral salphingo-opherectomy was done.

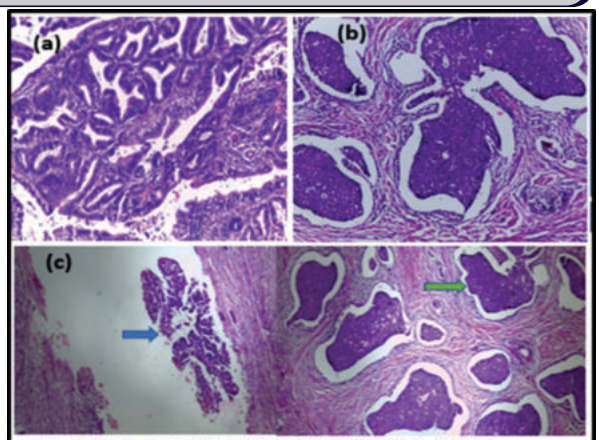
MACROSCOPY

Uterus measured about 8.6x5x4.5cm. On cutting through the cervix, identified an irregular indurated grey white area measuring 2.8x2.7x 2.5cm (green arrow). Endometrial cavity showed a grey white proliferating growth measuring 2.5x2x1.3cm in the fundic region (blue arrow), involving <50% of myometrium and was seen extending to isthmus.

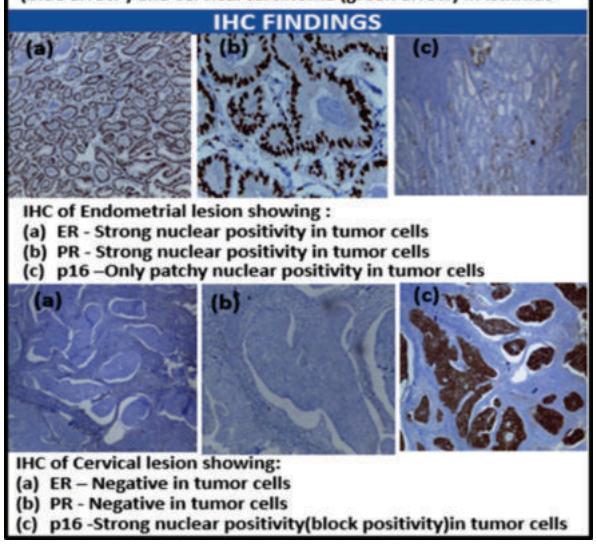


MICROSCOPY

Sections from endometrium showed an infiltrating neoplasm composed of cells arranged in villoglandular pattern, solid nests and tubules. Individual neoplastic cells are columnar to cuboidal with moderate eosinophilic cytoplasm and round to oval vesicular nuclei ,few with prominent nucleoli showing moderate pleomorphism. Focal squamous metaplasia noted. Tumor was seen extending upto isthmus. Sections from the cervix shows an infiltrating neoplasm composed of irregularly sized and shaped nest and sheets of neoplastic cells. Individual neoplastic cells are polygonal with moderate eosinophilic cytoplasm and vesicular to hyperchromatic nuclei few showing prominent nucleoli and intercellular bridges. No keratin pearls identified.



H&E- (a) Endometrioid endometrial carcinoma, (b) Non keratinizing squamous cell carcinoma cervix (c)Both endometrial (blue arrow) and cervical carcinoma (green arrow) in isthmus



IHC of Endometrial lesion showing :
(a) ER - Strong nuclear positivity in tumor cells
(b) PR - Strong nuclear positivity in tumor cells
(c) p16 –Only patchy nuclear positivity in tumor cells

IHC of Cervical lesion showing:
(a) ER – Negative in tumor cells
(b) PR - Negative in tumor cells
(c) p16 -Strong nuclear positivity(block positivity)in tumor cells

DISCUSSION

Synchronous endometrial and cervical carcinomas are extremely rare. According to Warren Gates, to diagnose MPM the following criteria should be fulfilled:(a) Each tumour should present a definite picture of malignancy, (b) Each tumour should be histologically different, (c) Possibility that one is a metastasis of the other must be excluded. Endometrioid endometrial carcinoma and non keratinising squamous cell carcinoma of cervix are differentiated mainly based on IHC studies .Endometrioid endometrial carcinoma shows strong ER and PR positivity and is p16 negative whereas non keratinising squamous cell carcinoma of cervix shows strong positivity for p16 and is negative for ER and PR. Both the tumors are managed by simultaneous surgical techniques based on National Comprehensive Cancer Network

(NCCN) guidelines , followed by chemotherapy and radiation.

CONCLUSION

In conclusion, Synchronous primary genital cancers are rare. Warren Gates criteria should be fulfilled to diagnose synchronous tumors. The management of both oncological conditions should be guided by precise diagnosis and stage of the disease for better prognosis. Typically, the prognosis of synchronous endometrial and cervical carcinoma is not worse compared to malignant tumors of the cervix alone as the diagnosis is triggered by early symptoms of endometrial carcinoma.

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