



A RARE CASE OF MALIGNANT MIXED MULLERIAN ENDOMETRIAL TUMOR WITH A SYNCHRONOUS CLEAR CELL OVARIAN CARCINOMA

Radio-Diagnosis

Dr. Pooja K. Mehtry	Senior Resident, Department of Radiodiagnosis, Srinivas Institute of Medical Sciences and Research Centre, Mukka
Dr. Serene Balaji	Senior Resident Department of Radiodiagnosis, Srinivas Institute of Medical Sciences and Research Centre, Mukka
Dr. Rajat Bajaj	Junior Resident, Department of Radiodiagnosis, Srinivas Institute of Medical Sciences and Research Centre, Mukka

ABSTRACT

Uterine malignant mixed mullerian tumors are rare aggressive tumors. It is also considered an aggressive form of endometrial carcinoma. Malignant mullerian tumors are composed of both epithelial and mesenchymal components. Epithelial components can be endometrioid, clear cell, serous, or undifferentiated types (1). It is also classified as homologous and heterologous types. The homologous type is the one in which the sarcomatous component is composed of endometrial stroma, fibrous, or smooth muscle. The heterologous tumor is composed of tissue that is not normally found in the uterus like skeletal muscle, cartilage, or bone (1). It can occur anywhere along the genital tract or in the peritoneum. However, synchronous occurrence of ovarian malignancy is rare. Here we have described such a case of uterine carcinosarcoma with synchronous presentation of clear cell ovarian carcinoma.

KEYWORDS

Endometrial, Uterus, Mullerian

INTRODUCTION

Endometrial carcinoma is the second most common gynaecological malignancy in developing countries. Its incidence is about 4.3 per 1,00,000 in India (2).

These patients present with intermenstrual or post-menopausal bleeding. (2) Affects women in the 6th or 7th decade. Risk factors include obesity, unopposed estrogen intake, nulliparity, and diabetes mellitus. (2) Diagnosis of endometrial carcinoma is made by endometrial biopsy. Endometrial carcinoma is of two subtypes – endometrioid adenocarcinoma (Type 1)

Type 2 includes clear cell, serous papillary, and carcinosarcomas.

Radiological investigations are done for staging. Initial imaging is done through transvaginal ultrasound. Endometrial carcinomas appear as abnormal endometrial thickness which is measured in anteroposterior dimension. Endometrial thickness of more than 5 mm is taken as abnormal in the postmenopausal period.

On contrast-enhanced CT, it appears as a hypoattenuating and hypo-enhancing mass in the endometrial cavity.

Case Report

Clinical Presentation

A 63-year-old female presented with a history of abdominal pain for 15 days. She also gave a history of post-menopausal bleeding.

Imaging Findings

Transabdominal ultrasound showed a bulky uterus with irregular thickened endometrium measuring around 38mm. Additionally, there was a very large left adnexal mass with significant vascularity and hemorrhagic areas.

Right, adnexa looked unremarkable. CECT was done for further evaluation. The left adnexal mass was deduced to be of ovarian origin because of multiple ovarian vessels entering the lesion. A tiny peripheral cystic focus was seen at the inferior aspect of the lesion which represented an ovarian follicle. This lesion showed heterogeneous enhancement with multiple large areas of necrosis and hemorrhage. The uterus showed heterogeneously enhancing endometrial mass showing polypoidal extension into the endocervical canal. Few parametrial deposits with nodular enhancement were seen bilaterally. Deposits were also seen in the pouch of Douglas.

Another similar hypodense deposit was seen in the right paracolic gutter with loss of interface with adjacent caecum suspicious for bowel serosal deposit.

Management

The patient underwent a total hysterectomy, bilateral salpingo-oophorectomy, right pelvic node, left pelvic node, and para-aortic nodal dissection. Biopsy samples were also taken from the pouch of Douglas, caecum, and omentum.

Histopathological evaluation revealed carcinosarcoma of the endometrium which showed a biphasic tumor composed of epithelial and sarcomatous components. There was also involvement of the right ovary, pouch of Douglas, and caecum. Histopathological evaluation of the left ovarian mass revealed tumor cells arranged in tubulocystic and papillary patterns consistent with clear cell carcinoma of the ovary.

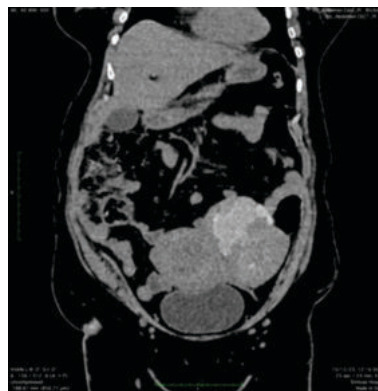


Fig1. CECT coronal image shows bulky uterus with dilated endometrial cavity occupied with hypo enhancing endometrial mass.

A large predominantly hemorrhagic and heterogeneously enhancing left adnexal mass also seen.

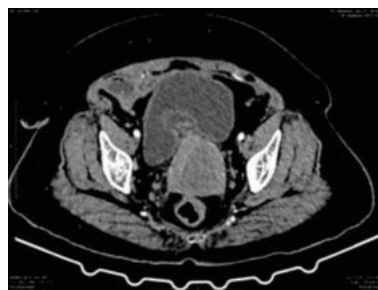


Fig2. CECT axial image showing bulky cervix with hypo enhancing endocervical mass.

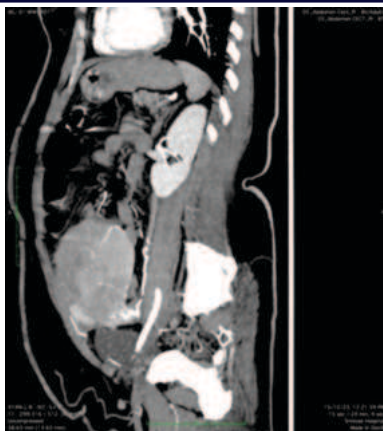


Fig 3. CECT sagittal (MIP) image shows prominent left ovarian vessels entering the left adnexal mass.



Fig 4. CECT Sagittal image showing hypo enhancing endometrial mass with polypoidal endocervical extension. A part of left adnexal mass is visualised superior to the uterus.

Hypo enhancing deposits in pouch of douglas.

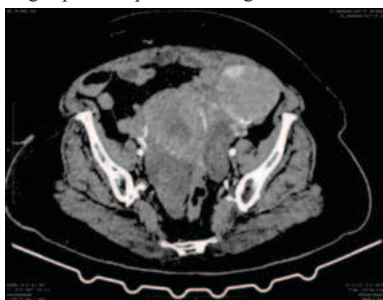


Fig 5. CECT axial image shows parametrial deposits bilaterally.

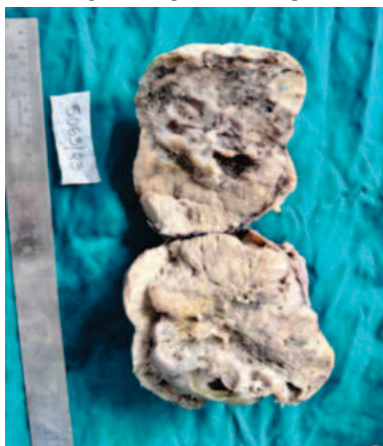


Fig 6. Gross specimen of left ovarian mass.



Fig 7. Gross Specimen of endometrial mass

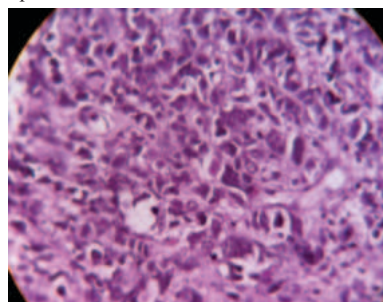


Fig 8. Histopathological slide showing features of clear cell carcinoma

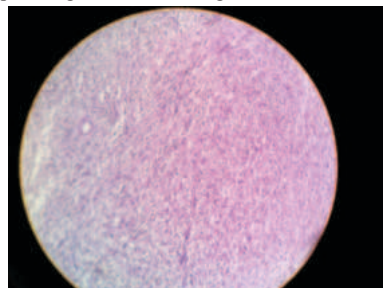


Fig 9. Histopathological slide showing biphasic tumor pattern with epithelial and sarcomatous components

Acknowledgements

We would like to thank Dr. Rachana Kiran Koppalkar (Assistant Professor), and the Department of Pathology, Srinivas Institute Of Medical Sciences And Research Centre for providing us with histopathological insight into this case.

We would also like to thank Dr. Sangeetha (Assistant Professor), and the Department of Obstetrics and Gynecology, Srinivas Institute Of Medical Sciences And Research Centre for providing intraoperative findings.

REFERENCES

1. NishatBharwani MRI Appearances of Uterine Malignant Mixed Müllerian Tumors April 10, 2010.195(5) 1268 - 1275
2. Silvana C Faria.Imaging in endometrial carcinoma. Indian J Radiol Imaging. 2015 Apr-Jun; 25(2): 137–147