

CASE REPORT



Carcinosarcoma of Uterus: a Case Report

Gaurav Shyam Desai¹ · Pallavi Rathod¹

Received: 4 March 2021 / Accepted: 15 May 2021 / Published online: 25 May 2021 © Federation of Obstetric & Gynecological Societies of India 2021

Abstract

Carcinosarcoma is a malignant mixed Müllerian tumor with a highly malignant, biphasic tumor consisting of both epithelial and mesenchymal components. A 59-year-old nulligravida came with postmenopausal bleeding. Hysteroscopy revealed highly vascular polypoidal mass with prominent vasculature. Gross examination of specimen showed a polypoid mass, occupying whole uterine cavity and invading more than half of myometrium. Immunohistochemical analysis showed epithelial component AE1/AE3 and stromal component desi and p16. Tumor cells were negative for ER. As carcinosarcoma is a highly aggressive less common variant of endometrial cancer, early diagnosis and aggressive treatment are important to minimize morbidity and overall survival.

Keywords Carcinosarcoma uterus \cdot Uterine cancer \cdot Staging laparotomy \cdot Malignant mixed Müllerian tumor

Case Report

A 59-year-old female, unmarried nulligravida came with complaint of severe postmenopausal bleeding since one year. She was obese (BMI: 38 kg/m^2) and a known case of hypertension on antihypertensive medications since 5 years. She had no other significant medical comorbidity or family history of malignancy.

At the onset of bleeding, a year ago patient underwent dilatation and curettage at an outside center which showed only benign proliferative endometrium with no evidence of malignancy. Her bleeding resumed even while taking tranexamic acid, and she now gave history of profuse white discharge since two weeks associated with perineal itching.

On examination, the uterus was bulky and fornices were free. USG was suggestive of well-defined hypoechoic lesion in anterior wall of endometrium and thickened ET of 13 mm. She underwent diagnostic hysteroscopy which

Dr. Gaurav Shyam Desai MS FCPS is an Assistant Professor of Obstetrics and Gynecology at the Seth GS Medical College and King Edward Memorial Hospital in Mumbai, India. Pallavi Rathod MS, Department of Obstetrics and Gynaecology, Bandra Bhabha Municipal General Hospital, Mumbai, India.

Gaurav Shyam Desai gdesai83@gmail.com

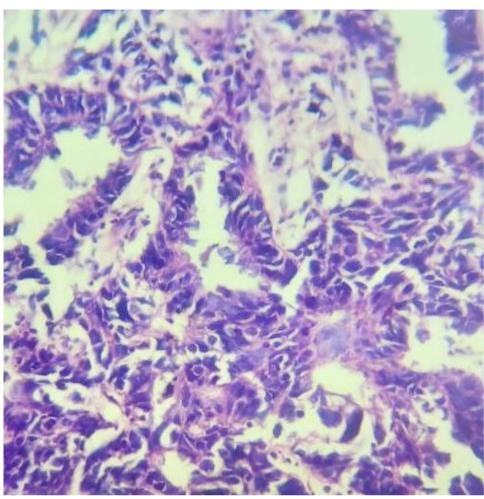
revealed a highly vascular polypoidal mass. Sampling of this mass revealed high-grade invasive malignancy, likely a



Fig. 1 Cut specimen of carcinosarcoma uterus after hysterectomy

¹ Department of Obstetrics and Gynecology, Bandra Bhabha Municipal General Hospital, Mumbai, India

87



carcinosarcoma on histopathology. MRI pelvis was suggestive of large lobular heterogeneous enhancing lesion occupying anterior wall of endometrium suggestive of malignancy and also few subcentric nonnecrotic bilateral external iliac and obturator lymph nodes. PAP smear was suggestive few squamous metaplastic cells.

Patient underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy with infracolic omentectomy and bilateral pelvic lymph node dissection. Histopathology report confirmed the high-grade carcinosarcoma of uterus invading more than half of myometrium with FIGO stage 1b (Figs. 1, 2).

Internal and external iliac group of lymph nodes retrieved did not show malignancy. Obturator lymph nodes were also negative for malignant cells. Omentum was free of any tumor cells. Immunohistochemical analysis showed epithelial component AE1/AE3 and stromal component desi and p16. Tumor cells were negative for ER. p53 showed mutation type of staining in stromal component and was of wild type in glandular component.

Discussion

Carcinosarcoma is an uncommon variant of endometrial cancer accounting for between 1 and 5% of uterine cancers [1]. Unlike endometrioid cancer, this histological type has less favorable survival rate. Distant and regional spread is also more common with carcinosarcoma. Treatment for carcinosarcoma is primarily surgical but does evolve chemotherapy and radiation [2].

Our case highlighted the importance of a diagnostic hysteroscopy in women with abnormal uterine bleeding. Each woman with postmenopausal bleeding must be considered to have the potential of malignancy unless proved negative on histopathology.

Screening with PAP smear and cytology are also important methods to pick up cases before they advance. In retrospect, carcinosarcomas are rapidly growing leading to large polypoidal masses within the uterine cavity. They are much more vascular as compared to the more common variant of endometrial cancer, the endometrioid variety. This

malignancy is invasive and causes much more bleeding due to its higher vascularity as compared to endometrioid type [3-5].

Conclusion

Aggressive management of postmenopausal bleeding with hysteroscopy and optimal surgical removal by staging laparotomy in addition to adjuvant therapy are important in management of uterine carcinosarcoma.

Conflict of interest There is no conflict of interest.

Informed Consent Informed consent was obtained from all individual participants included in the study.

References

- 1. Arend R, Doneza JA, Wright JD. Uterine carcinosarcoma. Curr Opin Oncol. 2011;23(5):531–6.
- 2. Cherian AG, Thomas A, Sebastian A, Sebastian T, Thomas V, et al. Outcomes of carcinosarcoma in a tertiary care institution in India. South Asian J Cancer. 2018;7(1):31–3.
- 3. Han Z, Zheng Z, Tao K, Yu Y, Wu J, Tian X. Uterine carcinosarcoma in a young female: case report and literature review. Cureus. 2021;13(1):e12642.

- 4. Soror NN, Woredekal D, Hemrock L, Gibson G, Bennett R. Uterine carcinosarcoma in a young female: case report and literature review. Cureus. 2021;13(1):e12642.
- El Hallani S, Arora R, Lin DI, Måsbäc A, et al. Mixed endometrioid adenocarcinoma and Müllerian adenosarcoma of the uterus and ovary: clinicopathologic characterization with emphasis on its distinction from carcinosarcoma. Am J Surg Pathol. 2021;45(3):374–83.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

About the Author



Dr. Gaurav Shyam Desai is an Assistant Professor of Obstetrics and Gynecology at the Seth GS Medical College and King Edward Memorial Hospital in Mumbai, India. He has authored over 30 peer-reviewed publications in national and international journals, and more than 90 scientific presentations at various conferences in India and abroad. His interests include high-risk obstetrics and pelvic surgery.