A CASE PRESENTATION

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MCh Second Year

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Mrs V, 60 year old housewife, belonging to lower socio economic class, presented to us in July 2013 with

- **Bleeding per vaginum** - 3 month duration
  - after being post menopausal for 5 years
  - scanty in amount
  - several episodes

- **Malodorous discharge per vaginum** - 2 month duration
  - scanty, no pruritus, no fever

- No loss of weight / appetite
- No alteration of bowel or bladder habits
Menstrual History:
Attained menarche at 14 years of age.
Previous cycles regular.
Attained menopause at 48 years of age

Obstetric History:
She is para 1, living 1. Normal delivery at 23 years of age.

Treatment History:
Evaluated for post menopausal bleeding elsewhere: uterine biopsy done was suggestive of malignancy. Patient came to us for further evaluation and management.
No h/o screening for cervical cancer. No h/o contraception / HRT
Past Medical / Surgical History:

- She had a left tibial fracture at 47 years of age; open reduction and internal fixation was done and plate was removed after 5 years.
- No known co-morbidities.

Family History:

- No genital tract, colorectal or breast malignancies in the family.
Q1. From the history, what conditions do you consider?
ON EXAMINATION.....

- Patient moderately built and nourished
- BMI: 26 kg/m²
- ECOG 1
- Pulse rate: 80/ min
- Blood Pressure: 110/80 mm Hg in right arm, sitting position
- No pallor/pedal edema / lymphadenopathy
- Afebrile to touch
- Breasts and thyroid examination within normal limits
- Cardiovascular & Respiratory systems normal
**Inspection:**
- Abdominal contour normal; umbilicus central
- All quadrants move equally with respiration
- No scars/sinuses/dilated veins/hernias

**Palpation**
- Abdomen- temperature normal. No guarding/tenderness/rigidity
- Midline mass, arising from the pelvis, just palpable

**Percussion**
- Abdomen tympanic
- No fluid thrill/shifting dullness
**Per Speculum**

- Cervix and vagina normal

**Per Vaginum**

- Uterus 10 weeks size; Left adnexal mass, about 8 cm

**Per Rectal**

- Cystic to firm mass felt behind and to left of the uterus;
  - No nodularity in POD; Mucosa normal
What is your clinical impression / differential diagnosis?

What investigations do you want?
INVESTIGATIONS

- **Pap smear:** Negative for malignancy
- **Endometrial biopsy:** High grade malignant neoplasm consistent with carcinosarcoma
- **CA 125:** 32 u/l
- **Ultrasound:** Uterus 10*6 cm, Endometrial thickness: 20 mm, A left adnexal mass, mainly solid, measuring 7*6 cm. Right adnexa normal. Free fluid in POD. Bilateral kidneys normal
- **CT abdomen/pelvis:** Small amount of ascites
  Distended endometrial cavity with enhancing soft tissue mass.
  Left sided, predominantly solid adnexal mass
  Left hydroureter due to mass effect.
  Sigmoid colon draped over mass, Rectal plane free of tumour
  Upper abdomen normal
PRE OP ENDOMETRIAL BIOPSY

Endometrium with intimate admixture of carcinomatous and sarcomatous component
What is your plan of management?
MULTI-DISCIPLINARY TUMOUR BOARD DISCUSSION

Plan for staging laparotomy
INTRA OPERATIVE FINDINGS

- Minimal Ascites
- A 10*8 cm left ovarian tumour adherent to left pelvic sidewall and sigmoid, partly cystic.
- Uterus 10 weeks size with friable tumour (4 x 2 cm) at fundus, invasion more than 50% of myometrium.
- Cervix normal
- Omentum thickened and adherent to left adnexa
- Parietal peritoneum, diaphragm, liver, gall bladder, appendix, small bowel normal.
- Staging laparotomy proceed
  - Ascitic fluid for cytology
  - Extrafascial abdominal hysterectomy
  - Bilateral salpingo oophorectomy
  - Pelvic lymphadenectomy
  - Para aortic lymphadenectomy
  - Omentectomy
  - Peritoneal biopsies
What is the format for reporting histopathology?

- Procedure
- Hysterectomy type
- Specimen integrity
- Tumour site, Size, Histology, Grade, LVSI
- Myometrial invasion: depth of invasion, myometrial thickness, percentage
- Adenomyosis, Serosal involvement
- Lower uterine segment / cervical stromal involvement
- Lymph nodes: total number, side, group, number involved, size (ITC, Micro/Macro)
- pTNM
- Additional Information: FIGO stage, Other findings, Ancillary studies (Biomarker format)
- Lynch syndrome / Comments
**FINAL HISTOPATHOLOGY**

- Hysterectomy specimen- carcinosarcoma endometrium (endometroid adenocarcinoma and poorly differentiated sarcoma)
- Small lymphovascular tumour emboli present
- Depth of invasion 1 cm and 1 cm away from nearest serosal surface
- Cervix and right adnexa free of tumour
- Endometroid adenocarcinoma, grade I, with endometriosis, left ovary and fallopian tube
- Bilateral gonadal vessels free of tumour
- 7 right pelvic, 16 left pelvic nodes free of tumour
- 8 right and 13 left para aortic nodes free of tumour
- Omentum free of tumour
Fig 6. Carcinomatous component in closely packed glandular structures with moderate nuclear atypia. (low power view)

Fig 7. Sarcomatous component are plump to spindly in sheets with moderate nuclear atypia. (high power view)
Fig 8. Left fallopian tube with tumour infiltration. (low power view)

Fig 9. Ovarian tumour with complex glandular structures (low power view)
Q 5.

- How do you differentiate between metastases and synchronous tumours?

- Seen in 5% of endometrial and 10% of ovarian cancers

<table>
<thead>
<tr>
<th>Factor</th>
<th>Metastasis</th>
<th>Synchronous</th>
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<tbody>
<tr>
<td>Age</td>
<td>Older</td>
<td>Younger</td>
</tr>
<tr>
<td>Histology</td>
<td>Same</td>
<td>Different</td>
</tr>
<tr>
<td>Grade</td>
<td>Same, High</td>
<td>Different, Low</td>
</tr>
<tr>
<td>LVSI</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Ovarian tumours</td>
<td>More Solid, Bilateral</td>
<td>More Cystic, Unilateral</td>
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<tr>
<td>Stage</td>
<td>Advanced primary</td>
<td>Both early</td>
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<tr>
<td>Tubes</td>
<td>Involved</td>
<td>Normal</td>
</tr>
<tr>
<td>Loss of heterozygosity</td>
<td>Similar</td>
<td>Different</td>
</tr>
<tr>
<td>Molecular markers</td>
<td>Similar</td>
<td>Different</td>
</tr>
<tr>
<td>Prognosis</td>
<td>Poor</td>
<td>Good</td>
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POST OPERATIVE PERIOD

- Post operative period was uneventful
- Staples removed on tenth post operative day
Q 6.

- What adjuvant treatment, if any?
ADJUVANT TREATMENT

CHEMOTHERAPY -

- 4 cycles of \textit{Inj} Paclitaxel, 220 mg (135 mg/m^2) and \textit{Inj} Ifosfamide 2600 mg (1600 mg/m^2)
**RADIOTHERAPY**

<table>
<thead>
<tr>
<th>REGION</th>
<th>PELVIS</th>
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<tbody>
<tr>
<td>BEAM</td>
<td>15 MeV</td>
</tr>
<tr>
<td>TECHNIQUE</td>
<td>4 FIELD BLOCK</td>
</tr>
<tr>
<td>DOSE AND FRACTIONS</td>
<td>50.4 GY IN 28 FRACTIONS</td>
</tr>
<tr>
<td>DATE OF START</td>
<td>30.12.2013</td>
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<tr>
<td>DATE OF COMPLETION</td>
<td>22.02.2014</td>
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Q 7.

What are the main trials in uterine carcinosarcoma?

- Observation vs Chemotherapy vs EBRT ~ Improved OS
- Chemotherapy vs EBRT +/- VBT ~ No difference in OS
- Ifosfamide vs Ifosfamide + Cisplatin ~ No difference
- Ifosfamide vs Ifosfamide + Paclitaxel ~ Improved OS

- Chemotherapy resulted in more pelvic recurrences
- Radiation therapy resulted in more distant recurrences
FOLLOW UP

- Patient has been on regular follow up over the years
- Last CT imaging as on 19.03.2019 does not show any features of recurrence
Q 8.

- **What are the biphasic tumours in gynaecology?**
- Benign / Benign: Adenofibroma
- Benign / Malignant: Adenosarcoma
- Malignant / Benign: Carcinofibroma
- Malignant / Malignant: Carcinosarcoma
Q 9.

- What is the evidence for monoclonality?

- Both the sarcomatous and carcinomatous areas express p53, CD10, Vimentin

- Ultrastructural, Immunological, tissue culture and molecular studies indicate monoclonality

- About 10% of carcinosarcomas may be true collision tumours
Q 10.

- What is the prognosis?

- Patients usually survive 8 to 26 months; Overall, 5 yr survival 30 %

- Stage I 65 %
- Stage II 45 %
- Stage III 15 %
- Stage IV 5 %
TAKE HOME MESSAGE

- Uterine Carcinosarcoma is a rare but highly aggressive neoplasm similar to high grade / type II endometrial cancers.

- Carcinosarcomas are mostly of monoclonal origin with the carcinomatous component being the driving force.

- All stages of carcinosarcoma require adjuvant therapy

- Since recurrence can be local or distant both chemotherapy and radiation therapy may be needed
ROLE OF RADIATION

- Helps achieve local control

- SEER analysis of 2677 women with uterine sarcoma (included carcinosarcoma) concluded that adjuvant radiation improved survival in stage II-IV stage disease

- EORTC-GCG 55874, PORT showed that adjuvant radiation reduced local recurrence while not significantly reducing distant metastasis.
ROLE OF CHEMOTHERAPY

- Theoretical benefit: reduction of distant metastasis
- PORTEC 3, GOG 249, GOG 258 excluded carcinosarcoma
- Combination chemotherapy preferred
- GOG 261
Chemotherapy naïve stage I - IV B or recurrent Uterine Carcinosarcoma (n = 536)

PC (P: 175mg/m2 with C: AUC 6 or 5 if prior RT q21days for 6-10 cycles.

PI (P: 135 mg/m2; I 1.6 g/m2 D1-3; G-CSF support) q21days for 6-10 cycles.

1:1 Randomization

Conclusions: Paclitaxel-Carboplatin was not inferior to Paclitaxel-Ifosfamide for OS with longer PFS and similar QOL and neurotoxicity.

OS: 37 months
PFS: 16 months

OS
HR: 0.87
P< 0.01 for NI

PFS
HR: 0.73
P< 0.01 for NI, S

OS: 29 months
PFS: 12 months
THANK YOU