

# UNUSUAL PRESENTATION OF METASTATIC CERVICAL CANCER: A CASE REPORT

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## Abstract

### Introduction

The cervical cancer screening programme was first introduced in England in 1988 to women aged 20-64 years and since then, the incidence of cervical cancer has decreased by over a third. Despite this, women with normal history of cervical smears can still present with advanced metastatic disease.

### The Case

A 60-year-old postmenopausal women with no significant past medical history, presented with a 4-week history of worsening green vaginal discharge and one episode of post menopausal bleeding. Up-to-date with her cervical smears which were normal. She had a Mirena coil in situ for the last 20 years. Her pelvic and speculum examination were unremarkable. Her transvaginal ultrasound scan revealed a 3.7cm pyometra inside the endometrial cavity. In view of these findings, she was started on two courses of antibiotics. However, she remained symptomatic therefore, underwent a hysteroscopy in which copious amounts of pus was aspirated and an MRI pelvis was organised.

### Investigations

MRI pelvis revealed uniform expansion of the uterine cavity by fluid and appearances, suggestive of obstruction at the level of the internal os. There were also small bilateral groin nodes measuring up to 1.2cm in size. A cervical smear was taken which revealed low grade dyskariosis and was positive for high risk HPV. Subsequently she underwent a laparoscopic hysterectomy and bilateral salpingo-oophorectomy. Histology showed moderately differentiated focally keratinising squamous cell carcinoma involving all four quadrants of the cervix and lower uterine, measuring 7cm with lymphovascular invasion and involving the paracervical fatty tissue.

### Conclusions

Post-operatively, she underwent a repeat MRI pelvis and FDG-PET/CT which revealed PET positive nodes, consistent with metastatic disease. She was referred for chemoradiotherapy. Pyometra can be associated with advanced endometrial or cervical cancer, reported in 0.89% of cervical cancer patients. Pyometra is an uncommon condition occurring in postmenopausal women, results when natural drainage of the uterine cavity is compromised

## Introduction

- The cervical screening programme was first introduced in England in 1988 to women aged 20-64 years.
- Since then the incidence of cervical cancer has decreased by over a third (from 15.0 to 9.8 per 100 000).
- Since 2003, cytology-based screening is offered once every 3 years to women aged 25–49 years and once every 5 years to women aged 50–64 years.
- Despite this, women with normal history of cervical smears can still present with advanced metastatic disease.
- Negative cervical smears do not exclude the possibility of primary cervical carcinoma.
- Cervical intra- epithelial neoplasia lesions have a higher probability to progress to invasive cancer at older age.

## The Case

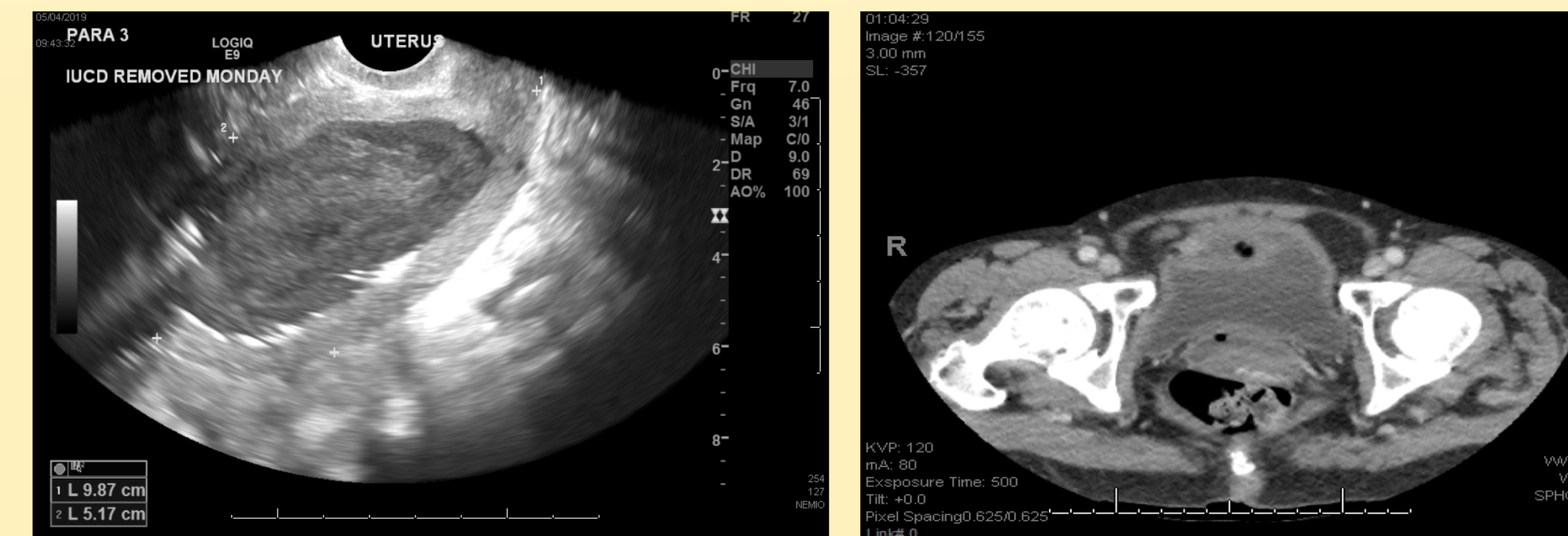
- A 60-year-old postmenopausal women with history of HTN on Amlodipine.
- Para 3, all vaginal deliveries and up-to-date with her cervical smears which were all normal.
- She had a Mirena coil in situ for 20 years.
- She presented with a 4-week history of worsening green vaginal discharge and one episode of postmenopausal bleeding.
- Her pelvic and speculum examination were unremarkable.
- The Mirena coil was removed during the examination and sent for histology.

## Investigations

- Transvaginal ultrasound scan revealed a 3.7cm pyometra inside the endometrial cavity.
- In view of these findings, she was started on two courses of antibiotics. However, she remained symptomatic.
- Therefore, underwent a hysteroscopy in which copious amounts of pus was aspirated but endometrial biopsy was insufficient, she was started on yet another course of antibiotic and an MRI pelvis was organised.

- MRI pelvis revealed a uniform expansion of the uterine cavity by fluid and appearances, suggestive of obstruction at the level of the internal os. No apparent carcinoma was suggested. There were also bilateral groin nodes measuring 1.2cm in size.
- Cervical smear was taken which revealed low grade dyskariosis and was positive for HPV.
- Histology results from the Mirena revealed inflamed cervical tissue and fragments of CIN2

## Initial imaging



- Abnormally distended uterine cavity by heterogenous fluid.
- Gas within the cavity suggestive of **Pyometra**.
- No cervical mass seen but a prominent hyperaemia noted on power doppler.
- Fluid expansion of the cavity.
- Suggestive of obstruction at the level of the internal os.
- Differential; either fibrosis or tumour.
- No obvious tumour seen
- Normal cervix; Aatrophic ovaries

## The Case

- She had 3 hysteroscopies, 4 pelvis USS and a MRI.
- Despite endless courses of antibiotics – She still remained symptomatic and was passing copious amounts of offensive discharge and pus.
- She was consented for TLH+BSO, for the non resolving suspected pyometra
- She under went a routine TLH+BSO. The operation was uncomplicated, the specimens were sent for histology and patient was discharged on day 2.
- She was readmitted with vaginal bleeding and feeling unwell 2 weeks post operatively.
- CT AP- was arranged and showed a 5cm collection posterior to the bladder.
- She was treated conservatively and discharged on a course of antibiotics.

## Histology Results

- Type; Moderately differentiated focally keratinizing squamous cell carcinoma.
- Tumour size; horizontal dimension 18mm, thickness 10mm.
- The tumour is seen involving all 4 quadrants of the cervix.
- Paracervical involvement present.
- Lymphovascular invasion; is present.
- Extensive high grade CIN is present.
- CGIN is absent.

### **Incidental unsuspected cervical malignancy stage IIIB**

On subsequent MRI post MDT and surgery found two PET positive nodes (Left external iliac)  
MRI post completed Chemo/radiotherapy confirmed nodes have either resolved or Significantly reduced in size.

## Conclusion

- Pyometra can be associated with advanced endometrial or cervical cancer, reported in 0.89% of patients with cervical cancer.
- Only a few cases have been described to the best of our knowledge.
- Pyometra is an uncommon condition occurring mainly in elderly postmenopausal females, and results when natural drainage of the uterine cavity is compromised.
- It is an accumulation of purulent material/pus in the uterine cavity.
- The common causes of pyometra include malignant condition of the genital tract and sequelae of their treatment, benign conditions such as infection and congenital cervical anomalies.
- The benign and malignant conditions cause accumulation of secretions and gradual enlargement of the uterus, leading to thinned uterine walls which may be sloughed with spontaneous uterine perforation causing a rare case of generalised peritonitis.

## References

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