Endometrial cancer recurrence presenting as anterior abdominal wall necrotising fasciitis: a case report.

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Background

Endometrial cancer is the second leading cause of malignancy in women worldwide (1), with recurrence dependent on primary tumour grade and stage as well as primary treatment.

We present a case of endometrial cancer recurrence causing anterior abdominal wall necrotising fasciitis, representing a distant and atypical site of recurrence.

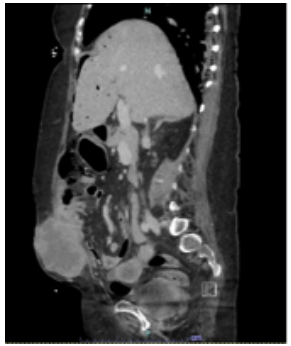

Figure 1: CT sagittal view showing a centrally-necrosed 75 x 84 x 56 mm anterior abdominal wall seroma with multiple sites of intra-abdominal free gas

Case

A 66-year-old woman presented to a hospital in remote Central Australia with a one day history of umbilical pain, systolic blood pressure of 80 mmHg and a lactate of 5.1. She had a known ventral hernia. Clinical suspicion was high for incarcerated bowel with perforation causing septic shock.

Five years prior, the patient was diagnosed with endometrial cancer – Grade III, Stage III mixed endometroid and clear cell. She underwent total abdominal hysterectomy, bilateral salpingo-oopherectomy, chemotherapy, radiotherapy and brachytherapy. No malignancy was detected over four years on history, examination, vaginal vault smear cytology and CT scans of the abdomen and pelvis.

One year prior, the patient required abdominal wall biological mesh for a ventral hernia repair. CT scan showed scarring and/or a seroma associated with this mesh which was stable in size over five months.

Fourteen months later during the presentation of concern, this seroma had augmented and was now centrally-necrosed (Figures 1 &2). CT also revealed free gas at three sites. Laparotomy revealed abdominal wall necrotising fasciitis in close association with the seroma and biological mesh. Intra-abdominal and pelvic organs were healthy; there was no evidence of peritoneal carcinomatosis. A seroma aspirate and tissue sample revealed malignant cells on cytology and histopathology – high-grade serous endometrial adenocarcinoma. She made a full recovery from this episode of necrotising fasciitis and was commenced on chemotherapy.

In brief, a distant metastasis of serous endometrial cancer in the form of a seroma caused degradation of biological mesh and localised infection, ultimately leading to necrotising fasciitis.

Discussion

Guidelines for endometrial cancer surveillance suggest five years of routine follow-up, with most recurrences detected within the first three years (2). History and physical examination identify 70-80% of recurrent disease (2). Vaginal cytology detects only locoregional recurrence.

Aggressive subtypes of endometrial cancer can recur at atypical sites such as the anterior abdominal wall (3). Surveillance imaging with CT has been studied for high-risk endometrial cancer, however prognosis is not improved by image-detected recurrence, even if recurrence is detected before symptoms develop (4,5).

Malignancy is a well-known risk factor for necrotising fasciitis. Polymicrobial necrotising fasciitis, by way of *Clostridium* bacteria, produces subcutaneous gas in soft tissue, which is the most common radiological finding (6). In the presented case, radiographic evidence of free intra-abdominal gas was initially attributed to suspected perforated bowel, however with hindsight it was likely driven by necrotising fasciitis and/or necrosis associated with malignancy.

Conclusion

This case report demonstrates a presentation of endometrial cancer recurrence not previously published in the literature - as a seroma with serous histomorphology associated with biological mesh, causing necrotising fasciitis.

This case also highlights the diagnostic challenges associated with necrotising fasciitis, the extent of which is only discovered intra-operatively.

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