

A very unusual presentation of endometrial cancer relapse

Uma apresentação muito rara de metastização de carcinoma do endométrio

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Abstract

Endometrial cancer is a frequent gynaecological malignancy, generally associated with good prognosis. Common metastasis sites include lungs, liver and lymph nodes, but not the abdominal wall.

A 51-year-old patient, with endometrioid endometrial adenocarcinoma was submitted to hysterectomy and bilateral adnexectomy. Histopathology confirmed FIGO stage IA and absence of lymphovascular invasion. A year later, a suspicious lesion's biopsy in the abdominal wall revealed a metastasis of the primary cancer, which was removed.

In spite of low risk factors for relapse, the patient developed a rare metastasis site. This emphasises the necessity of close surveillance and high level of suspicion for diagnosis.

Keywords: Neoplasm metastasis, Endometrial neoplasms, Early detection of cancer.

INTRODUCTION

Endometrial cancer is the most common gynaecological cancer. There are several histological subtypes, being the endometrioid the most frequent and the one associated with better prognosis. Most cases present in post-menopausal women, with abnormal uterine bleeding, and thus can be diagnosed at an early stage and, consequently, have a more favourable prognosis, with high survival rates^{1,2}.

About 21% may present with spread to regional organs and lymph nodes and 8% with distant metastasis². Others can develop metastasis after the primary treatment, which is more common in the first years of follow-up². The most common recurrence sites are the vagina, pelvic and para-aortic lymph nodes, peritoneum and lungs. Abdominal wall metastasis of endometrial cancer are not typical.

Given the rare presentation of endometrial cancer metastasis and the challenges it can present in its management, it is of the uttermost importance to share this clinical case with the scientific community.

An informed consent was obtained from the patient prior to the elaboration of this article.

CLINICAL CASE

A 51-year-old post-menopausal female patient, with dyslipidaemia and heterozygous Factor V Leiden mutation and hyperhomocystenemia, referred to the gynaecologic department for persistent vaginal bleeding, was submitted to an hysteroscopic endometrial biopsy that revealed an endometrioid adenocarcinoma. The initial workup (transvaginal ultrasound, pelvic magnetic resonance imaging and thoracic radiography) excluded advanced or metastatic disease; CA 125 was normal (18,10 U/mL).

The patient was submitted to an abdominal hysterectomy and bilateral adnexectomy (infra-umbilical medial section and no drain left in the pelvis) with frozen section of the uterus and adnexa confirming

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FIGO stage IA. Therefore, the pelvic and para-aortic lymphadenectomy were not performed. The surgical specimen revealed absence of lymphovascular invasion, classifying the neoplasia as a ESGO/ESMO/ESTRO low risk endometrial cancer, and no adjuvant treatment were performed. She maintained clinical surveillance in Gynaecologic Oncology consultation in our hospital since then, and a year after the diagnosis the patient developed abdominal wall pain and went to the emergency room, having been diagnosed with an infected abdominal rectus sheath hematoma, with 120 x 71mm, which was drained. In the hospital admission, she later developed a bilateral pulmonary thromboembolism, thus having been medicated with

anticoagulants. Two months later, she kept complaining of persistent abdominal pain .

To evaluate the persistent abdominal pain, an abdomino-pelvic computed tomography (CT) scan was done. It showed a suspicious lesion in the muscular planes of the right abdominal wall, with 83 x 56 mm, with heterogenous central hypodense areas and local contrast captation in the periphery (Figure 1).

Given the oncological history of the patient, it was necessary to obtain a sample tissue for histological evaluation to exclude a metastasis. The lesion was submitted to biopsy, which revealed a metastasis of an adenocarcinoma, compatible with the previously diagnosed primary endometrial cancer.

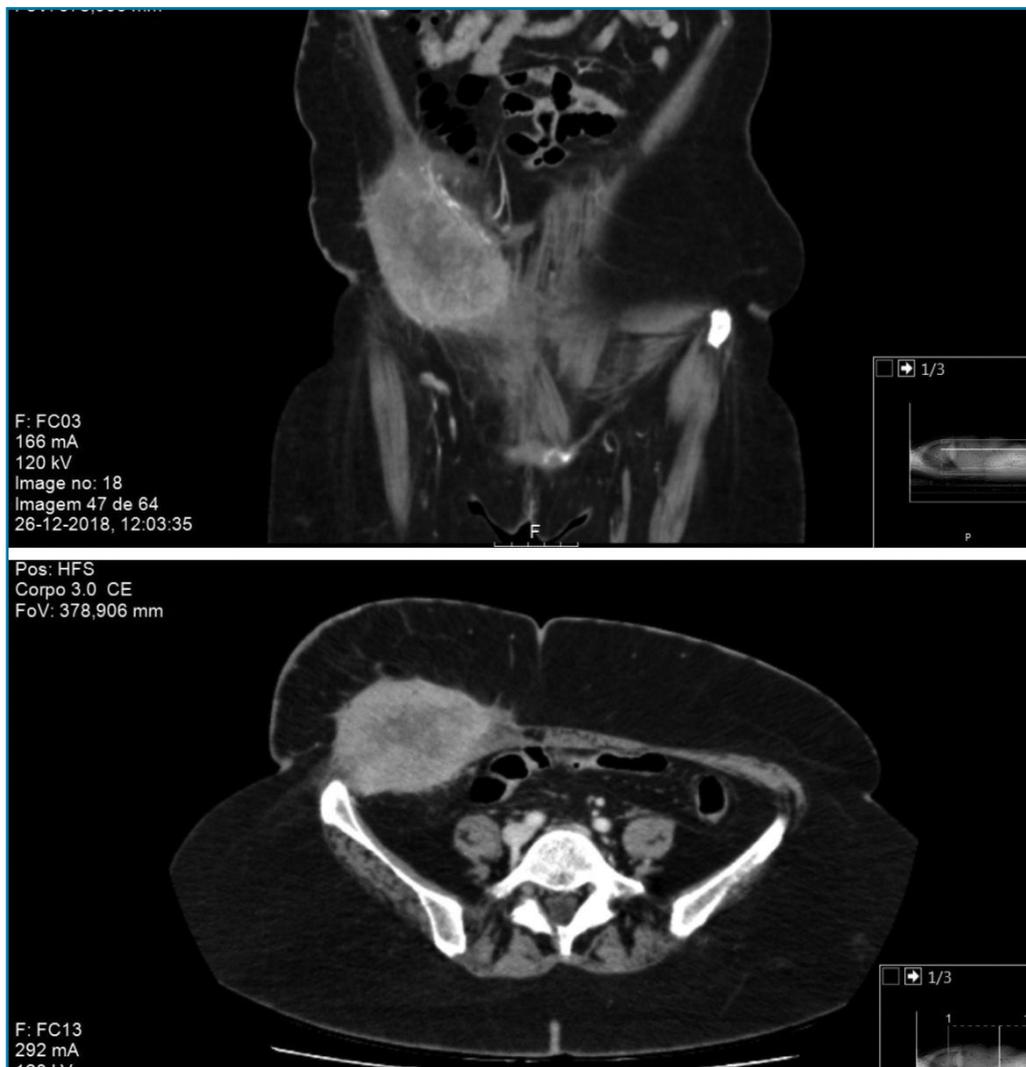


FIGURE 1. Abdomino-pelvic CT-scan showed a suspicious lesion in the muscular planes of the right abdominal wall, with heterogenous central hypodense areas and local contrast captation in the periphery.

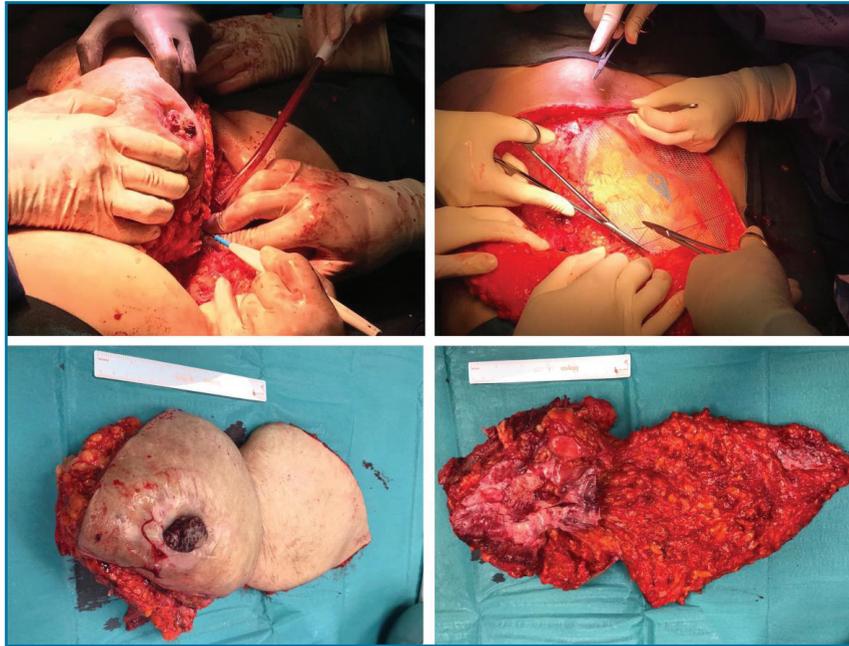


FIGURE 2. The top images show the surgical removal of the metastasis (bloc removal of the peritoneum, aponeurosis, rectus and external oblique muscles, iliac crest, subcutaneous cellular tissue and skin) and the reconstruction of the abdominal wall with a mesh. The bottom images demonstrate the anterior and posterior faces of the surgical resection specimen.



FIGURE 3. The right abdominal wall metastasis immediately before surgery (top image), and the final result at the end of the surgical procedure (bottom image)

The persistent abdominal pain could translate another possible haemorrhagic complication (hematoma), since the patient was under anticoagulants, or an infectious one. It was also necessary to exclude early metastasis of endometrial adenocarcinoma, given the patient's history. An abdomino-pelvic CT-scan is useful in the evaluation of these differential diagnoses, including common possible sites of metastasis, for instance liver or lymph nodes.

The patient was evaluated by a multidisciplinary team (oncologic gynaecologist, medical oncologist, radiologist, radiotherapist and plastic surgeon) and a radical surgical approach was decided. It was performed an arciform suprapubic and supraumbilical incisions, detachment of the subcutaneous cellular tissue on the left, and bloc removal of the peritoneum, aponeurosis, rectus and external oblique muscles, iliac crest on the right, and subcutaneous cellular tissue and skin bilaterally. There was no evidence of macroscopic disease elsewhere in the abdominal cavity.

The abdominal wall was reconstructed with a doubled-face monofilament polyester composit mesh and an umbilical transposition was performed (Figures 2 and 3).

In the post-operative period, the patient developed an operative wound infection, with isolation of multi-

ple bacteria (*Corynebacterium amycolatum*, *pseudomonas aeruginosa*, *staphylococcus epidermidis*), having been medicated with intravenous antibiotics. She had a good recovery and was discharged after 23 days. She then maintained surveillance in the outpatient consult, with regular wound dressing care. The wound is currently completely closed.

The final histological result of the surgery showed skin, subcutaneous cellular tissue and muscular neoplastic involvement, with the same characteristics as the primary tumour.

The multidisciplinary oncologic group decided to perform radiotherapy. It included a total dose of 45 Gray (Gy) in 14 daily 1,8Gy fractions, and an additional boost of 5,4Gy in 3 daily 1,8Gy fractions.

The patient has 14 months of follow-up since the abdominal wall metastasis with no sign of recurrence/persistence of disease to date.

DISCUSSION

Endometrial cancer is the most common gynaecological cancer. Most of the cases present in an early stage, especially the endometrioid histological subtype. The clinical case reported here supports this, since our patient was diagnosed with a FIGO IA, grade 2, endometrioid endometrial cancer^{1,2}. The surgery, which consisted of an abdominal hysterectomy and bilateral adnexectomy, was performed with a curative purpose.

Given the low risk of lymph node involvement (<5%), lymphadenectomy is not recommended for patients with low-risk endometrial cancer^{3,4}.

Sentinel lymph node dissection is not yet recommended by international guidelines remaining experimental, therefore is not done in our institution³.

The American College of Obstetricians and Gynecologists (ACOG) affirm that several randomized trials have demonstrated that adjuvant radiation for certain stage I or stage II endometrial carcinomas reduces the local recurrence rate but does not affect overall survival⁵. National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology 2018 recommends observation or vaginal brachytherapy after surgery in IA with less than 50% myometrium invasion with no additional risk factors of recurrence⁶. The American Society of Clinical Oncology (ASCO) states that surveillance is a reasonable option for women without residual disease in the hysterectomy specimen and for women with grade 1 or 2 cancer and

< 50% myometrial invasion, especially when no other high-risk features are present⁷.

Factors that could increase the risk of relapse include age (more than 60 years old), serous, clear-cell, carcinosarcoma or carcinosarcoma histological types, grade 3, invasion of the outer myometrium, tumoral extension beyond the uterine body, lymphovascular invasion, lymph node metastasis and tumour with more than 2cm in size¹. Our patient did not present any of these risk factors, and still had an early (1 year) relapse⁸.

The information in the literature about abdominal wall metastasis of endometrial cancer is sparse. Saudi Arabian authors have published in 2017 a case report about a metastatic endometrial carcinoma at the repair site of an abdominal wall incisional hernia in a 55-year-old woman 4 years after surgical treatment of endometrioid adenocarcinoma of the endometrium. The lesion was surgically removed and the patient remained without metastatic recurrence at 12-month follow-up⁹. In our case, the recurrence was not located in the incision site but lateral to the abdominal rectus muscle, and no drain was left in the pelvis when abdominal hysterectomy and bilateral adnexectomy was performed.

A Chinese study focused on the FDG PET/CT findings of an isolated abdominal wall metastasis of endometrial adenocarcinoma 4 years after primary surgery in a 51-year-old woman¹⁰. Another case report from the United States of America hypothesized a possible role of laparoscopic surgery port-sites in endometrial cancer metastasis, after a 78-year-old patient developed a metastasis in the former port-sites 1 year after surgical treatment for a IB grade 3 endometrial adenocarcinoma¹¹. A slightly different 2018 case report from Turkish authors showed a chest wall metastasis in a 57-year-old woman with endometrioid-type adenocarcinoma of the endometrium 8 years after the initial diagnosis, which was excised without complications¹².

Thus, abdominal wall metastases of endometrial cancer are rare, and there is not a sufficient number of cases published in the literature, which makes the treatment and orientation of these patients more challenging.

In this particular case, it was crucial to involve multidisciplinary collaboration (Gynaecology and Plastic Surgery), to achieve a good esthetical result and improve the patient's prognosis, since it was possible to remove the single metastasis in its entirety. This case also emphasises the importance of keeping close surveil-

lance on these patients and a high level of suspicion for early diagnosis of rare metastasis sites.

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