Synchronous splenic metastasis of endometrial carcinoma

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Accepted 30 May 2019

DESCRIPTION

A 70-year-old patient presented in October 2016 with postmenopausal vaginal bleeding associated with diffuse abdominal pain, especially in the lower abdomen. She underwent clinical and ultrasound evaluation and hysteroscopy with endometrial biopsy, with pathological result of endometrioid grade 3 endometrial carcinoma.

MR staging did not reveal deep myometrial invasion or pelvic adenomegalies (figure 1A–D), but a splenic tumour was depicted (figure 1E,F). A Positron Emission Tomography (PET) scan was ordered and did not show other lesions (figure 1G). Considering the rarity of the diagnosis of solitary splenic metastasis, with about 100 cases described in the literature (half of which originated from female genital tract tumours, most often from ovarian neoplasms, with only 13 cases described in the context of endometrial carcinoma),¹ the hypothesis of splenic angiosarcoma was primarily considered. However, spleen biopsy (performed in December 2016; figure 2A) confirmed the diagnosis of a solitary splenic metastasis from endometrial carcinoma.

In February 2017, the patient underwent total hysterectomy with bilateral salpingo-oophorectomy (figure 2B) and concomitant splenectomy (figure 2C). In macroscopic pathology, the spleen was 18×11×11cm in size with a solid tumour

Figure 2 High-power (×200) histological section stained with H&E shows an intraparenchymal metastasis of a poorly differentiated endometrioid carcinoma; black arrow in the red pulp of the spleen (A); endometrial carcinoma invading the myometrium (H&E) (B); gross specimen of the spleen after splenectomy depicts a large mass in the spleen, extending to the margins of the specimen, with diffuse infiltration of the parenchyma (C).

measuring 12cm, with the postoperative diagnosis of spleen metastasis of endometrial origin.

Endometrial carcinoma is the most common gynaecological cancer in developed countries. Spleen metastasis is very uncommon (usually secondary to lung and breast cancers), and solitary spleen metastasis from endometrial carcinoma is even rarer. When secondary to endometrial carcinoma, they were found to be metachronous in relation to the diagnosis of endometrial carcinoma, solitary and limited to the parenchyma.² To the best of our knowledge, the case we present is the first where the splenic metastasis was synchronous with the endometrial carcinoma diagnosis.

Spleen metastasis has no specific symptoms, emphasising the importance of including the upper abdomen when performing radiological studies for cancer staging and follow-up.³

Figure 1 Axial T2-weighted (A), axial oblique contrast-enhanced three-dimensional gradient echo image with fat suppression after contrast injection (B) and diffusion-weighted imaging (C,D=1000) with apparent diffusion coefficient map (D) MR images of the uterus show the endometrial tumour (black arrows in A and B, white arrows in C and D) hyperintense and with less enhancement relatively to normal endometrium, without extension to the outer myometrium. Coronal T2-weighted image (E) shows a splenic tumour (black arrow) synchronous with the endometrial carcinoma (*). Axial T2 (F) image depicts the large splenic lesion (black arrow), also detected in the positron emission tomography (PET) scan (G).

Patient's perspective

I am glad to share my case, realising that it is rare and I think it was a diagnostic and therapeutic success. I hope that by sharing my case I can help other patients in the future, who find themselves in situations similar to mine.

Learning points

- ▶ Solitary spleen metastasis can rarely occur and can be assessed by image-guided biopsy.
- ▶ Radiology must include upper abdomen sequences in the initial high-grade endometrial cancer staging.
- ▶ Splenectomy is the best treatment option in cases of solitary metastasis.

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To cite: Pissarra AP, Cunha TM, Mata S, et al. *BMJ Case Rep* 2019;**12**:e230957. doi:10.1136/bcr-2019-230957

The patient is alive without signs of recurrence, 14 months after splenectomy and six cycles of chemotherapy (paclitaxel and carboplatin).

Contributors APP wrote the article and together with TMC interpreted the MRI scan. SM and AF made the pathological evaluation and provided the microscopic and macroscopic pictures.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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