Letter to the Editor

The role of ultrasound examination in the management of a patient with hemoperitoneum and an ovarian mass: a clinical-diagnostic challenge

Spazzini et al. Anaemia and ovarian mass

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To the Editor;
Ovarian metastasis is a rare presentation of endometrial cancer. Moreover it is a sporadic cause of haemoperitoneum causing severe anemia. Therefore we decided to describe our case of hemoperitoneum determined severe anaemia due to ovarian mass, metastasis of endometrial cancer. The aim of this report was to bring to attentions some observations.

We reported the case of a 49-year-old nulliparous woman with abdominal swelling and severe abdominal pain. She presented fever and tachycardia. The blood test showed severe anemia (Hb:3.8 g/dL). Both transvaginal and transabdominal ultrasound examinations were performed. They showed thickened vascularized endometrium of 18 mm, irregular myometrial-endometrial junctions, and a large solid tumor with the largest diameter of 100 mm and regular external wall in the right side of the pelvis. At Color Doppler examination, the tumor was richly vascularized. The left ovary appeared normal. Both ascites and free fluid in the pouch of Douglas were also noted suggesting hemoperitoneum. The patient underwent surgery, immediately after hemodynamic stabilization and blood transfusions. Laparotomy confirmed the presence of hemoperitoneum and of a large right ovarian mass. The right ovarian mass was removed and the frozen section was positive for borderline tumor (Figure 1). Considering the age of the patient and the ultrasound findings, a radical hysterectomy (Morrow & Querleu type A) and bilateral salpingo-oophorectomy were performed. Final histology was positive for grade 3 endometrioid carcinoma of the endometrium with 88% of myometrial invasion; vagina and parametria were infiltrated. The ovarian mass was found to be a metastasis from the endometrial cancer. The patient underwent chemotherapy, radiotherapy and brachytherapy with good clinical response (disease free at 28 months follow-up).
The peculiarity of the case were: hemoperitoneum and severe anemia are rarely observed in patients with endometrial cancer. Endometrial cancer usually begins with abnormal uterine bleeding, not presented by our patient. Ovarian metastasis is also a rare finding in endometrial cancer (2,3) and it is usually bilateral (4), whereas in our case the metastasis was unilateral. Our results agree with those previously reported by other authors: ovarian metastases from endometrial cancer appear as vascularized solid tumor (4).

In the present manuscript, we highlight the difficulties in diagnosing endometrial cancer in the absence of typical symptoms and risk factors. We also emphasize the key role of ultrasound examination in an emergency setting: to guide the surgeon in planning the best surgical treatment.

Finally, it should be remembered that, only the final histology can provide the correct diagnosis. In our patient, a borderline tumor was suspected at frozen section, but final histology was positive for an invasive tumor. Borderline tumors require different management from invasive tumors (5). In this case the surgeon performed the correct surgery first time, because the ultrasound findings suggested a malignant tumor.

In conclusion, we presented the case of a patient with endometrial cancer metastatic to the ovary that was discovered due to hemoperitoneum and severe anemia. The ultrasound examination played an important role in the management of this case.

References
Figure 1. Ovarian mass, send to preliminary histological examination