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CLINICAL VIGNETTE

Advanced ovarian cancer imitating deep infiltrating endometriosis. Radical resection and reconstructive surgery of the anterior abdominal wall

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ABSTRACT

Endometriosis is a disease affecting approximately 10–15% of the female population of reproductive age [1]. A rare location is endometriosis in the scar after caesarean section — CSE (caesarean scar endometriosis) accounting for 0.5–1.0 % of all cases. Although endometriosis is usually a benign condition, its malignant transformation affects 0.7–1% of cases. In women diagnosed with ovarian cancer, foci of endometriosis are present in up to 30% of patients. This paper presents the case of a 36-year-old patient initially diagnosed with extensive endometriosis involving the anterior abdominal wall and the pelvis minor. After biopsy, a diagnosis of advanced low-grade serous ovarian cancer was established. The diagnostic methods used and the extent of surgery with reconstruction of the anterior abdominal wall were described.

Key words: endometriosis; ovarian cancer; surgical treatment

CASE STUDY

A 36-year-old female patient with history of laparoscopic excision of benign ovarian cyst and caesarean section was presented to the gynaecologist because of abdominal pain that worsened during menstruation. Examination revealed only 3 cm lesion in the caesarean section scar. After twelve months of follow-up, due to worsening of symptoms, magnetic resonance imaging (MRI) was performed and showed: pelvic tumour infiltrating the rectal wall interrupting the mucosa, measuring 31 mm AP 48 mm TR 45 mm CC. The tumour infiltrated the vault of the vagina creating a satellite focus of 12 × 16 mm in size. In addition, a solid tumour in the lower abdominal walls in the left rectus muscle measuring 27 × 43 × 33 mm surrounded by oedema infiltrating the peritoneum of the corpus uteri per continuum, closely adhering to the descending colon at a length of 13 mm. Numerous nodular implants in the parietal peritoneum up to 13 mm in diameter. Fluid collection in the vesico-uterine pouch 24 × 65 with an implant infiltrating the anterior uterine wall. (Fig 1A).

Only CA-125 — 50.68 U/mL was elevated. Core needle biopsy of the abdominal skin lesion and colonoscopy were performed. Histopathological report of the abdominal and colorectal tumour revealed low-grade serous carcinoma lesions originating from the ovary. Immunohistochemistry Ca-125 (+), p53(+), CK20(-), CK7 (+), Ki67(+) 30%.

Complete surgical debulking was performed: En-bloc Hudson's pelvic resection with segmental resection of rectum, sigmoid colon. Removal of diaphragmatic carcinomatosis with partial resection of the diaphragm muscle, liver capsule and peritoneum of Morrison's pouch. Supracolic omentectomy along with neoplastic lesions of the splenic hilum. Partial resection of the rectus abdominis muscle along with the rectus fascia and adjacent peritoneum. Due to the impossibility of suturing the layers of the anterior abdominal wall (Fig. 1B), a modified Ramirez surgical method was used to approximate the borders of the fascia (Fig. 1C). Additionally, in order to strengthen the abdominal wall, a hernia mesh was sewn in using the "onlay" technique (Fig.1D).

DISCUSSION

Ovarian cancer is most often diagnosed in the fifth and sixth decades of life. Cases under the age of 40 are very rare. Endometriosis as a benign disease affecting approximately 10–15% of the female population of reproductive age may pose a risk of malignant

transformation in 0.7–1% of cases [1, 2]. Endometriosis related ovarian neoplasms (ERONs) develop mainly from the endometrial epithelium of ovarian cysts [3]. In contrast, in women already diagnosed with ovarian cancer, endometriosis foci are present in up to 30% of cases — endometriosis-associated ovarian cancer (EAOC). In the case of EAOC, those are 40–55% clear cell carcinomas, 20–40% endometrioid carcinomas and only less than 10% are serous and mucinous carcinomas [4]. Patients with low-grade serous ovarian cancer have a limited response to chemotherapy (approximately 23%), thus surgery is the most important element of treatment [5]. The presented case showed that oncological vigilance should be maintained even in young women with symptoms suggestive of endometriosis.

Conflict of interest

All authors declare no conflict of interest.

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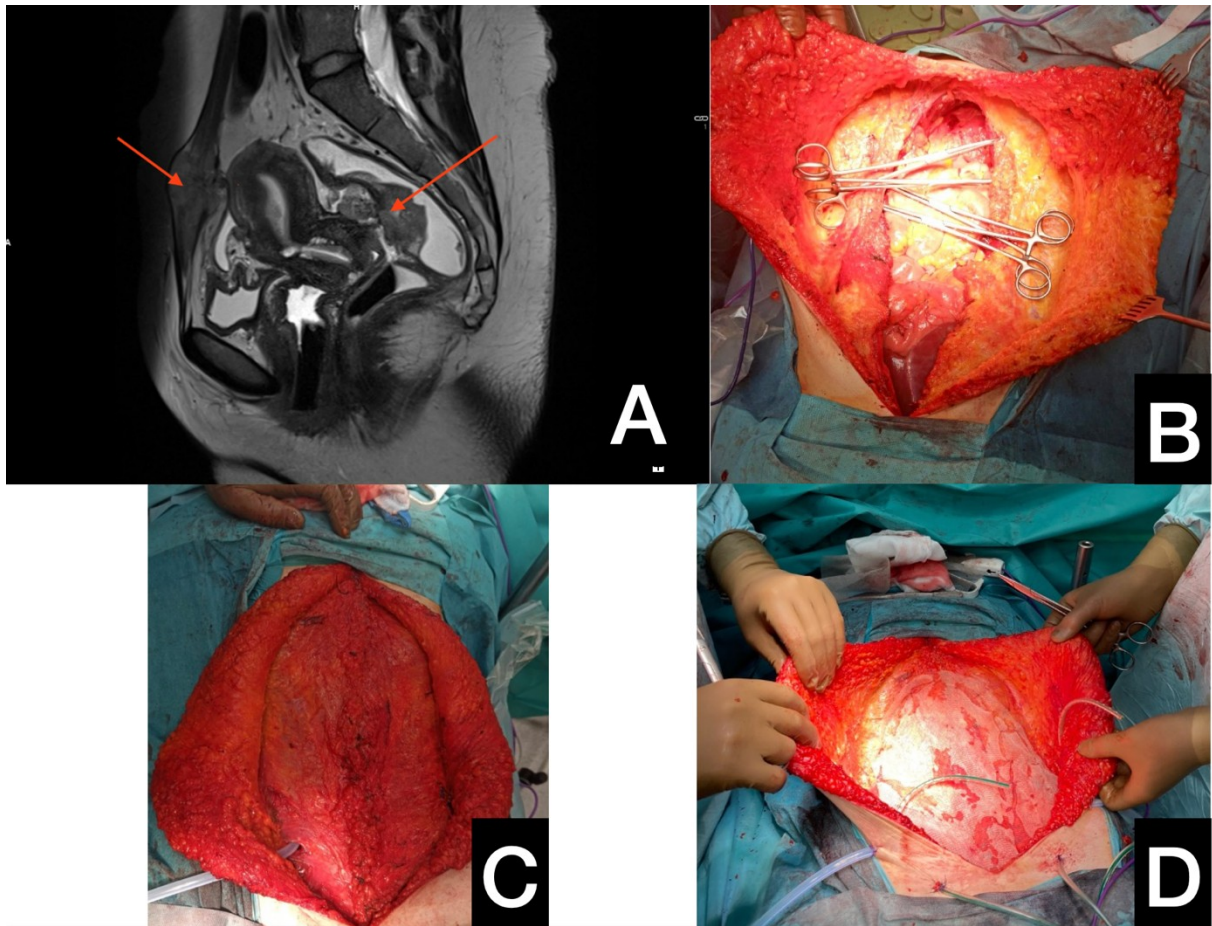


Figure 1 (A) MRI scan; the arrows indicate neoplastic lesions of the anterior abdominal wall and pelvis minor; (B) defect of the anterior abdominal wall, (C) status after application of modified Ramirez surgical technique; (D) status after onlay hernia mesh implantation