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Case Report

Recurrent Hemoperitoneum During Pregnancy in Large Deep Endometriosis Infiltrating the Parametrium

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ABSTRACT We present the case of a young woman at 16 weeks' gestation who presented to a peripheral hospital with severe recurrent hemoperitoneum related to severe deep endometriosis infiltrating the left parametrium. She underwent 2 surgical open procedures in emergency, followed by pregnancy loss. Deep endometriosis infiltrated the rectum, the vagina, and the left parametrium, leading to stenosis of the left ureter and advanced destruction of the left kidney. Ovarian reserve was low with an antimullerian hormone level at .6 ng/mL. To improve endometriosis-related symptoms and preserve fertility, a laparoscopic conservative rectal and ureteral management was proposed with an aim to relieve symptoms, avoid further destruction of the left kidney, preserve the right splanchnic nerves and inferior hypogastric plexus, and enhance spontaneous conception. We performed a combined vaginal–laparoscopic approach that consisted of vaginal infiltration resection, adhesiolysis, rectal shaving, ureterolysis, and restoration of the permeability of the fallopian tubes. Seven months after surgery the patient spontaneously conceived and is doing well. Journal of Minimally Invasive Gynecology (2016) 23, 643–646 © 2016 AAGL. All rights reserved.

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Although pregnancy is generally associated with regression of endometriosis-related symptoms, spontaneous hemoperitoneum during pregnancy may occur as a rare and severe complication. We present a case of a massive spontaneous recurrent hemoperitoneum in a pregnant woman with deep endometriosis infiltrating the rectum, the left parametrium, the left ureter, and the vagina and discuss complete management of her severe disease.

Case Report

A 26-year-old gravida 2 para 0 with a single pregnancy at 16 weeks' gestation was admitted with severe brutal pelvic pain to the emergency department of a peripheral hospital. Abdominal and pelvic ultrasonography showed a voluminous intra-abdominal fluid collection. Emergency laparoscopy revealed the presence of a massive hemoperitoneum, with rapid aspiration of 3000 mL of blood. The intervention was then converted to an open procedure by a midline skin incision. Pelvic exploration revealed the existence of an active hemorrhage originating from the left parametrium, which was infiltrated by a large 5-cm endometriosis nodule involving the left uterine artery and the posterior wall of the uterus and the left uterosacral ligament. Complete hemostasis was achieved by several interrupted sutures performed on both the left uterine parametrium and uterine vessels. The patient was transfused 4 units of packed red blood cells during the procedure. She was then transferred to the intensive care unit postoperatively.

Dr. Roman reports personal fees for participating in a symposium and a masterclass presenting his experience in the use of PlasmaJet. The authors declare that they have no other conflicts of interest.

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Computed tomography performed at postoperative day 2 showed left hydronephrosis due to ureter stricture at the level of the left parametrium, which was temporarily managed by the placement of a left ureteral double J stent. Intrauterine fetal death was diagnosed at day 4 postoperatively, and pregnancy was terminated using misoprostol, which necessitated further uterine curettage to accomplish complete uterine evacuation. The following day the patient presented with severe de novo pelvic pain, where a computed tomography scan revealed the presence of a recurrent massive hemoperitoneum. A second open surgery by the same skin incision was realized in emergency (Supplementary Fig. 1). The hemorrhage originated from the same left uterine vessels and was controlled in a similar manner by the performance of several hemostatic sutures. Postoperative outcomes were uneventful.

Two months later an exhaustive assessment by pelvic ultrasonography, abdominal and pelvic magnetic resonance imaging, endorectal ultrasonography, colonoscopy, and renal scintigraphy was performed. Investigations confirmed the presence of a large 5-cm deep endometriosis nodule of the left parametrium, responsible for stenosis of the left ureter (Fig. 1). The muscular layer of the midrectum was involved over 3 cm in length, in addition to a 4-cm infiltration of the posterior and left cul de sac of the vagina. Moreover, a 7-cm endometriosis cyst existed between the left and right ovaries. Advanced atrophy of the left kidney was found, with a diminished renal function at 12% of normal. The antimullerian hormone level was significantly decreased at .6 ng/mL.

The patient sought care in several tertiary referral centers, where first-line in vitro fertilization (IVF) was systematically recommended followed by radical surgery to be performed after pregnancy. The surgical proposition by those centers included the performance of a colorectal resection, a segmental resection of the left ureter with ureteric reimplantation into the bladder, and hysterectomy. At this point she was referred to our department.

The patient complained of chronic constipation alternating with diarrhea, dyschesia, pelvic pain, deep dyspareunia, and dysuria during menses. Vaginal examination showed a huge painful involvement of the posterior and left cul de sac (Supplementary Fig. 2). We proposed first-line surgery with a goal to relieve endometriosis-related symptoms, avoid further destruction of the left kidney, and preserve the right splanchnic nerves and the inferior

Fig. 1

Preoperative assessment by magnetic resonance imaging. Yellow arrows indicate the endometriosis nodule, the extraovarian cyst, and left kidney.