

P350. Laparoscopic, pregnancy-preserving management of massive hemoperitoneum after corpus luteum cyst rupture in early gestation

R Watrowski (DE) [1]

Context: Acute hemoperitoneum rarely complicates intrauterine pregnancies. This life-threatening condition can be caused e.g. by a ruptured corpus luteum (CL) cyst. Damage (e.g. due to the thermal hemostasis or hemostatic sutures) or removal of a CL can be fatal for pregnancy, as the CL is the main source of progesterone in the first 7 weeks of gestation. Usually, acute hemoperitoneum in pregnancy is approached via laparotomy. Objective/ Methods: Case report. Participant: A 33 years old gravida 2, para 1, body mass index 19, attended our clinic with an acute abdomen. The initial ultrasound scan revealed a large left-sided ovarian cyst, 7cm in diameter, with free abdominal fluid in presence of viable intrauterine embryo of 2.1 mm CRL, corresponding to 5+5 weeks of pregnancy. The patient was hemodynamically stable. The initial hemoglobin (Hb) and hCG concentrations were 13.6 g/dl and 21500 U/l, respectively. Intervention: Emergent laparoscopy was performed. Results: Intraabdominally, one liter of hemoperitoneum was evacuated per suction. In the left ovary, a ruptured, bleeding CL cyst of 7 cm in diameter, with the typical yellow inner surface, and additionally one small (2.5 cm) thin-walled serous ovarian cyst, were seen. An excisional biopsy of the CL cyst was taken whereas the CL itself was preserved. Atraumatic hemostasis was obtained without diathermy by use of hemostatic matrix (FloSeal®). The small serous cyst was partially removed. The ovary was reformed with a tension-free, continuous absorbable suture. The histology confirmed both macroscopic diagnoses. On the 3rd postoperative day, the transvaginal ultrasound confirmed a viable pregnancy of 3.7 mm CRL, corresponding to the 6+0 weeks of pregnancy. The Hb had dropped to 11.8 g/dl. The patient recovered quickly and was discharged on the 4th postoperative day. Vaginal supplementation with micronized progesterone was immediately initiated and continued up to 12 gestational weeks. The pregnancy course was uneventful. A healthy female baby (2860 g) was delivered vaginally at 38+3 weeks of gestation. Conclusions: In the event of acute hemoperitoneum due to a bleeding CL, its preservation and therefore maintenance of pregnancy is feasible by use of atraumatic hemostats (e.g. hemostatic matrix) instead of thermal coagulation or hemostatic sutures. Laparoscopy is a suitable and safe option for acute hemoperitoneum in early pregnancy and is associated with low postoperative morbidity.

[1] Department of Gynecology and Obstetrics, St. Josefskrankenhaus, Teaching Hospital of the University of Freiburg, Freiburg