

## 24. POSTPARTUM SPONTANEOUS HEMOPERITONEUM AND ENDOMETRIOSIS – CASE REPORT



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**Introduction.** Spontaneous hemoperitoneum in pregnancy (SHiP) is characterized by unprovoked intraperitoneal bleeding with an incidence rate of 1:10000 pregnancies. Endometriosis represents one of the main risk factors and it is associated with 55.9% cases of SHiP.

**Case statement.** A 37-year-old primipara was admitted for spontaneous labor at 40+4 weeks of gestation. She had a normal pregnancy with no history of endometriosis. The complications occurred in the second period of labor, manifested with acute fetal distress, therefore a rapid vacuum extraction was performed and a boy was born with an Apgar score of 8/8 points. About 10 h after the delivery, the patient complained of abdominal distension, she became tachycardic and hypotensive, the hemoglobin value dropped to 91 g/l. During transabdominal sonography it was noticed free peritoneal fluid. The patient was taken to OR for a laparotomy, intraoperative was detected with a hemoperitoneum of  $\approx 1700$  ml. The endometrial tissue was on the posterior surface of the uterus with active venous bleeding. The local area had a blue to purple discoloration measuring 2 cm  $\times$  1 cm. Hysterectomy was performed. Total blood loss was  $\approx 3500$  ml. Histopathology of the bleeding site was consistent with endometriosis, characterized by decidualization of the lesion and glandular structures. The patient was discharged on the 16th postoperative day without complications.

**Discussions.** Brosens et al. in 2009 reviewed all cases of SHiP described since 1987, during the study he noticed that SHiP was associated with endometriosis in  $> 50\%$  of cases. However, one-third of the endometriosis-associated SHiP cases had no history of endometriosis. In the latest review of 59 cases in 2017, the maternal death rate was 1.7%. Current hypothesis suggested that decidualization, chronic inflammation, and preexisting adhesion of endometriosis play a role in SHiP development. Physical efforts were reported as the triggering factor of SHiP, such as pushing during labor and the use of vacuum extraction. Due to the difficulty of diagnosis and the frequent presentation of unstable maternal hemodynamic conditions, surgical intervention is unavoidable in most SHiP cases. The main choice of surgical approach is laparotomy. Common bleeding sites in SHiP include the serosa of the posterior wall of the uterus, the broad ligaments, or the uterosacral ligaments.

**Conclusion.** SHiP is a rare but dramatic cause of maternal mortality and morbidity. The pelvic endometriosis may play an important role in the pathogenesis of SHiP. Management requires a multidisciplinary approach with early surgical intervention and fluid optimisation for appropriate intravascular volume replacement.