

ISP-11-6 Uterine artery pseudoaneurysm manifesting as postpartum hemorrhage after precipitate labor

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Secondary postpartum hemorrhage is defined as an excessive genital bleeding between 24 hours and 12 weeks after delivery. In developed countries, about 2% of women in postpartum period need hospitalization due to secondary postpartum hemorrhage. The most common cause of this disorder is retained conception products in the uterine cavity, and the other common causes are infection, involution of placental implantation site and so on.

Recently, uterine artery pseudoaneurysm has been emerged as a possible cause of secondary postpartum hemorrhage. Uterine artery pseudoaneurysm is a blood filled sac communicating with the lumen of uterine artery. In most of reported cases of uterine artery pseudoaneurysm manifesting as secondary postpartum hemorrhage, it is associated with previously performed surgical of interventional procedure, such as cesarean section or dilatation and curettage.

We recently encountered the rare case of uterine artery pseudoaneurysm manifested as secondary postpartum hemorrhage after precipitate labor, which is successfully treated with consecutive 4 times of uterine artery embolization.

A 28-year-old Korean woman, gravida 0, para 0 was referred to Chonnam National University Hospital due to preterm premature rupture of membrane (PPROM) at 26+4 weeks of gestation. She was admitted to hospital and started conservative treatment with prophylactic antibiotics and tocolytic agents. At the 12th day of hospitalization, her uterine contraction and cervical dilation was uncontrolled despite tocolytics treatment. As she proceeds to the active phase of labor, and her cervix dilated to 4 cm in diameter, the tocolytic agents was stopped. Just 15 minutes after, her cervix dilated fully and she delivered 1020g female. Though it was precipitate labor, she discharged from hospital after 2 days from labor, without any complications.

After a week, she visited to the outpatient department with vaginal bleeding. At ultrasonographic and pelvic examination, mild uterine subinvolution and a 3×3 cm sized mass with necrotic tissue was shown and the mass was removed which was revealed as decidualized stroma with necrotic tissue. After 2 days of hospitalization and conservative treatment, she was discharged. But after a week, she visited again due to increased vaginal bleeding, soaking 5 small pads per day. Transvaginal sonography still showed 29.0×18.0×22.8mm sized ovoid mass like lesion at the level of uterine cervix, and Color doppler sonography showed to and pro blood flow within this area. Under the impression of vascular malformation, the pelvic angiography was performed and revealed 2.5 cm sized pseudoaneurysm connected to left uterine artery. Selective left uterine arteriography and embolization with gelatin sponge was performed successfully. The patient recovered uneventfully following embolization, despite repeat ultrasonography revealed slow return of blood flow into the pseudoaneurysm, performed 4 days later. Second selective both uterine artery angiography and embolization was performed with gelatin sponge. Due to repetitive revascularization and remained vaginal spotting, she underwent 2 times more angiography and embolization after 1 month and 2 months from first embolization. After 2 weeks from last embolization, no more mass and blood flow was shown at ultrasonography, and there were no more vaginal spotting or bleeding.

ISP-11-7 Surgical indication of perinatal ovarian cyst-35 cases of benign ovarian mass

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Introduction : Enlarged ovarian cysts during pregnancy often cause rupture or torsion. In such cases, surgical treatment may be a suitable approach. We studied 35 cases of ovarian cysts during pregnancy that were surgically treated. **Methods :** We included patients with ovarian cysts during pregnancy who underwent surgery at the Japanese Red Cross Medical Center between June 2007 and August 2011. Size of the cyst, imaging findings, pathological diagnosis, and complications were analyzed for these cases. **Results :** The maximum diameter of the ovary ranged from 35 to 165 mm. Elective surgery was performed between 6 and 15 weeks of gestation. The predominant pathological diagnosis was dermoid cysts, followed by endometrial cysts and serous cystadenomas. In 4 patients with acute abdominal pain, the adnexal mass was not palpable, and 8 patients underwent emergency surgery during pregnancy. Dermoid cysts were identified during the surgery in 3 undiagnosed cases involving abdominal pain. **Conclusion :** While most of the diagnosed ovarian cysts were surgically treated, dermoid cysts were diagnosed during the operation in patients presenting with acute abdominal pain, thus indicating the difficulty in diagnosing dermoid cysts. Negative consequences such as rupture, or torsion and the possibility of the cysts being dermoid, must be considered in the diagnosis of ovarian cysts during pregnancy.

ISP-12-1 Relationship between Abnormal Microbial Growth on Cervical Cerclage Stitches and Adverse Pregnancy Outcomes

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Objective : To determine whether abnormal microbial growth on cervical cerclage stitches is associated with adverse pregnancy outcomes.

Methods : This retrospective cohort study included 141 women who underwent cervical cerclage stitch removal between January 1998 and October 2010. After the stitch removal, sterile speculum examination and stitch culture were performed. The qualitative and quantitative culture results were evaluated. In addition, the relationship between microbial growth on the removed stitches and adverse pregnancy outcomes was analysed by using Fisher's exact test; $P < 0.05$ was considered significant.

Results : Forty-two women completed the study and 45 adequate stitch cultures were obtained. Twelve cultures (26.7%) showed no microbial growth but 33 cultures (73.3%) demonstrated abnormal microbial growth. Fourteen of the 45 cultures (31.1%) were associated with preterm birth (<37 weeks of gestation), including 10 cultures (30.3%) with abnormal microbial growth. Among the 44 cultures checked for associations with low birth weight, 32 cultures (72.7%) showed abnormal microbial growth and 6 (18.8%) were associated with low birth weight (<2500 g). However, the associations of abnormal microbial growth with preterm birth and low birth weight was not significant ($P = 0.558$ and 0.621 , respectively).

Conclusions : The results suggest no significant relationship between microbial growth on cervical cerclage stitches and adverse pregnancy outcomes.