

## Spontaneous Rupture of An Endometriotic Cyst

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**Key words:** endometrial cyst rupture

### Case Report

Mrs. JD, a 41 year old woman came with severe lower abdominal pain which was followed by abdominal distension and vomiting. It was her fourth day of menses but the menstrual flow was less than the normal flow. She had one full term vaginal delivery 8 years back. Her husband lived away and there was no history of sexual contact.

She was averagely built and nourished. She was pale, her pulse rate was 120 beats/minute and blood pressure 100/60 mmHg. Abdominal examination showed tenderness and guarding all over with free fluid in the peritoneal cavity. There was no visible peristalsis. On speculum examination, blood stained discharge was seen through cervical os. Vaginal examination showed a normal size uterus and forniceal fullness with tender cervical movements.

The clinical impression was either ruptured ovarian cyst or ruptured ectopic pregnancy. Laboratory investigations revealed hemoglobin of 8.8gm%. Her urinary pregnancy test was negative. Sonography of the pelvis done 4 months earlier showed normal sized uterus with right ovarian cyst of 3.1 x 2.9 cms. Sonography of the pelvis done at the time of admission showed moderate amount of abdominal and pelvic free fluid with a 5 x 4 cm mass of heterogenous echotexture in right adnexa.

She was taken for emergency exploratory laparotomy which showed 400 ml hemoperitoneum with old altered blood. Uterus appeared normal. The right ovary showed 7 x 6 cms size cyst which had ruptured and was leaking a chocolate colored material. The left ovary had 3 x 4 cms size chocolate cyst. Both fallopian tubes appeared thickened, and inflamed, and bowel loops were adherent to the posterior wall of the uterus. The right ovarian cyst wall was excised and the left ovarian cyst was marsupialised retaining normal ovarian tissue. Histopathological report showed bilateral ovarian endometriotic cyst.

Paper received on 9/4/02 ; accepted on 27/9/02

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### Discussion

The etiology of rupture of an endometriotic cyst is presumably increasing pressure by the fluid in the cyst inside. The case described here gives a dramatic picture of an acute abdomen mimicking ruptured ectopic pregnancy and illustrates the importance of considering endometriosis as a differential diagnosis for abdominal pain. Spontaneous rupture of an endometriotic cyst is very rare. Very few cases have been reported till now and most of them were associated with early pregnancy<sup>1</sup>. Although pregnancy is generally thought to have beneficial effects on endometriosis, the latter may progress throughout pregnancy<sup>1,3</sup>. Adhesions have been implicated as the cause of rupture of endometrioma during pregnancy due to increase in tension when uterus enlarges and its anatomical position is altered<sup>2,4,5</sup>. In the cases where adhesions are absent, decreased abdominal space as pregnant uterus occupies the abdomen, may induce the cyst to rupture<sup>6</sup>. Alternative explanation is that increased or decreased blood flow during pregnancy can induce enlargement of cyst and perhaps bleeding into the cyst itself and eventually rupture. Rupture during pregnancy may also occur secondary to softening of lesion due to stromal decidualisation<sup>1</sup>. In our patient, dense adhesions between ovary and surrounding structures may have contributed to the rupture.

### References

1. Garcia - Velasco JA, Alvarez M, Palumbo A et al. Rupture of an ovarian endometrioma during the first trimester of pregnancy. *Eur J Obstet Gynecol Reprod Biol* 1998; 76: 41-3.
2. Rossmen F, D'Ablaing G, Marrs RP. Pregnancy complicated by ruptured endometrioma. *Obstet Gynecol* 1983; 62 : 519-21.
3. Vercellini P, Ferrari A, Vendole N et al. Growth and rupture of ovarian endometrioma in pregnancy. *Int J Gynecol Obstet* 1992-37 : 203-5.
4. Johnson TPB, Woodruff J F: Surgical emergencies of uterine adnexae during pregnancy. *Int J Obstet Gynecol* 1986; 24: 331-5.
5. Barbazia MJ, Neyro JL, Montoya F: Rupture endometrioma during pregnancy. *J Obstet Gynecol* 1993; 13: 40.
6. Thrush P, Willard D. Pseudo-ectopic pregnancy: an ovarian cyst mimicking ectopic pregnancy. *West Virginia Med J* 1989; 85 : 488-9.