Spontaneous rupture of an ovarian tumor during labor

Sir,

This report discusses a rare case of rupture of an ovarian tumor during labor. A 25-year-old primigravida, at 39 weeks of gestation was admitted to the labor room on May 1st 2001, with a history of lower abdominal pain and leakage of liquor for 10 hours prior to admission. The course of her pregnancy was uneventful and she had one ultrasound examination in the 2nd trimester of pregnancy. On admission, she was healthy, with blood pressure 120/70 mmHg, pulse rate 76 per minute, hemoglobin concentration 9.8gm/dl and white blood count $8.22x10^9$/L. On examination, the abdomen was soft and the uterus was term size with moderate contractions, 2 in 10 minutes. The fetus was in cephalic presentation. Vaginal examination revealed a soft, fully effaced and 4 centimeters dilated cervix with vertex at -2 station. The membranes were absent and light meconium stained liquor was seen. Epidermal analgesia was commenced at the patient's request. Approximately 8 hours and 30 minutes later, the fetus developed acute distress (scalp pH of 7.19) and the decision for emergency cesarean section was made. After opening the abdominal cavity through Pfannenstiel incision, about 30ml of pus was seen in front of the uterus. The pus was sent for culture. A live female baby weighing 3000 grams was delivered with an Apgar of 5 at one minute and 8 at 5 minutes. Uterine closure was performed in the routine fashion. During the exploration of the abdominal cavity 200ml of purulent fluid was revealed. On further exploration, a ruptured dermoid cyst, arising from the right ovary was found. The size of the tumor was approximately 8x8 cm. The right fallopian tube was very edematous, distended and looked unhealthy. A degenerated and infected subserous fibroid, 3x4 cm in diameter, was present on the anterior wall of the uterus. Right salpingo-ovariotomy and myomectomy were performed. The fallopian tube and ovary on the other side as well as appendix were normal in appearance. A thorough and repeated peritoneal lavage was carried out with 0.9%NaCl, with special attention to the paracolic gutters and perihepatic area. An intraperitoneal suction drain was left in-situ. Blood loss was approximately 750ml. The patient was put on antibiotics (Ceftriaxone, Metronidazole and Gentamicin) in the post-operative period. She made an uneventful recovery and was discharged on day 7 after the surgery. The pathology reports confirmed benign mature teratoma of ovary and hyalinized leiomyoma. The high vaginal swab and placental swab did not show any growth. Although ovarian tumor sometimes complicates pregnancy,[1] spontaneous rupture of benign teratoma during labor is very uncommon and to the best of our knowledge no similar case has been described before in the medical literature. As for any other septic condition in the abdominal cavity, urgent laparotomy and removal of tumor followed by thorough lavage are the crucial factors affecting outcome of this situation. In our case, luckily for the patient and medical staff, the diagnosis was made accidentally doing cesarean section. This made a quick and uneventful recovery possible. We are not able to comment why, inspite of ultrasound examination, the tumor was not revealed earlier in pregnancy.

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