with mass effect, and (3) chemotherapy induced problem. CT scan of the brain was done and showed intracerebral hemorrhage in right middle cerebral artery territory with mass effect (Figure 4).

The next day she regained consciousness but was disoriented and confused. Her pulse rate fell to 58/minute, pupils became dilated reacting sluggishly to light and planters were extensor. Despite all resuscitation measures she expired on 20^{th} August, 2003. Postmortem could not be performed due to refusal by the relatives.



Figure 3. Xray chest showing metastatic deposits.





Silent fundal rupture due to placenta percreta in a women with previous lower segment scar

Gupta Vineeta, Kukreti Manishi, Goel Geetika, Harsh Meena

Himalayan Institute of Medical Sciences, Swami Rama Nagar, Dehradun-248140.

Key words : placenta percreta, rupture uterus, previous cesarean section

Discussion

Choriocarcinoma is an extremely malignant form of trophoblastic tumor. The characteristic gross picture is that of a rapidly growing mass invading the uterine muscles and blood vessels, and causing hemorrhage and necrosis. Ovarian theca leutin cysts are identified in over a third of the cases ¹. They were observed in our patient.

The natural history of untreated choriocarcinoma is characterized by development of early hematogenous metastases the common sites being lungs, brain, liver, kidney and bowel. Risk factors affecting the disease are serum β hCG > 100,000 miu/mL and duration of disease > 6 months from termination of antecedent pregnancy ².

In the present case the patient did not receive chemotherapy immediately after surgery and she developed early metastasis in the lungs and brain within a short period of time, with a high serum β hCG level (5,73,980 miu/mL).

A long interval between the antecedent pregnancy and the onset of chemotherapy is an adverse prognostic factor and may result in failed chemotherapy ³.

FIGO revised the staging of gestational trophoblastic diseases in 2000. The total score of a patient is obtained by adding individual scores for each prognostic factor like age, antecedent pregnancy, interval from index pregnancy, pretreatment β hCG level, tumor size, site and number of metastases, and previous failed chemotherapy. A total score of 0-6 is considered low risk and > 7 as high risk ⁴. Our patient was definitely in the high risk group with a score > 7.

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Correspondence : Dr. Ajit Ranjan Bhattacharya 204/1/8 Raja Rammohan Roy Road, P. O. Barisha Kolkata - 700008.

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Introduction

Silent rupture of uterine fundus during pregnancy is a rare event.

Case report

A 24 year old 3^{rd} gravida was admitted with complaints of loss of fetal movement since 3 days following amenorrhea of 9 months. There was no history of labor pains or leaking per vaginum. She was $G_3P_2L_1$ with a previous LSCS done 2 years back for cephalopelvic disproportion and one preterm vaginal delivery followed by a doubtful history of manual removal of placenta

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a year ago. On examination, the patient was dyspneic with mild pallor. Her pulse rate was 110 beats/minute and blood pressure 100/70 mm Hg. Her abdomen was distended, tense and tender. The fetus was in breech presentation with absent fetal heart sounds. There was no scar tenderness. She had a ultrasound study done outside just prior to admission. It revealed a single fetus of 35 weeks in breech presentation with intrauterine death. Her routine investigations and coagulation profile were within normal limits. With a suspicion of scar rupture, she was immediately taken up for laparotomy. At laparotomy plenty of thick purulent foul smelling fluid was drained from the peritoneal cavity. The dead baby was lying in the abdominal cavity in breech presentation and was taken out. On exploration, uterine rupture was detected in the fundal region, through which placenta was partially seen. Removal of placenta was tried but it was morbidly adherent to the uterine wall reaching up to the serosa of the uterus, suggesting placenta percreta. The previous scar area was found to be intact. Subtotal hysterectomy was performed and the specimen sent for histopathological examination. Peritoneal lavage was done and the abdomen closed after leaving a drain in place. Two units of blood were transfused and broad spectrum antibiotics given. During the postoperative period, she became febrile and responded to antimalarial treatment. Stitches were removed on the 10th postoperative day and she was discharged in satisfactory condition.

Histopathological examination of the specimen revealed placental tissue infiltrating the whole thickness of the myometrium upto the serosa at some places and showed areas of infarction (Figures 1 and 2). The findings were consistent with the diagnosis of placenta percreta.



Figure 1. Microphotograph showing chorionic villi abutting myometrium without intervening decidual tissue.



Figure 2. Microphotograph showing chorionic villi penetrating deep into the myometrium

Discussion

The term placenta accreta is used to describe any placental implantation in which there is abnormally firm adherence to the uterine wall due to the placental villi being attached to the myometrium. In placenta increta, the villi actually invade the myometrium and in placenta percreta, they penetrate through the myometrium ¹.

Abnormal placental adherence is found when decidual formation is defective. Associated conditions include implantation in the lower uterine segment over a previous cesarean section scar, implantation over other previous uterine incisions, and implantation after uterine curettage ¹. Other risk factors include multiparity, previous infection, manual removal of placenta, synecolysis, and myomectomy. The incidence ranges from 1 in 1667 to 1 in 67,000 pregnancies ². Diagnosis is usually made after delivery when difficulty is encountered in removal of the placenta. But nowadays, ultrasound imaging, color doppler, power amplitude ultrasonic angiography and MRI have all proved to be valuable in the early diagnosis of placenta accreta, increta and percreta during pregnancy. In fact, placenta percreta has been diagnosed and reported as early as 10 weeks ³. Sometimes a woman, usually multiparous, may present with a ruptured uterus and spontaneous rupture has been reported in primigravid uterus secondary to placenta percreta ⁴. Pathological confirmation includes - (a) absence of decidua basalis, (b) absence of Nitabuch's fibrinoid layer and (c) varying degree of penetration of the villi into the muscle bundle (increta) or upto the serosal layer (percreta). The risks include hemorrhage, shock, infection, and rarely inversion of the uterus.

Successful treatment depends upon immediate blood replacement therapy and nearly always prompt hysterectomy. Alternative measures include uterine or internal iliac artery ligation or angiographic embolization ¹.

Our case is unusual and interesting because in a women with previous scar in the lower uterine segment, rupture of the uterus occurred in the fundal region during late pregnancy without any labor pains, due to placenta percreta not associated with placenta previa. Probably, placenta percreta in this case was due to manual removal of placenta done previously.

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Correspondence : Dr. GuptaVineeta Department of Obstetrics & Gynaecology Himalayn Institute of Medical Sciences Swami Rama Nagar, Dehradun - 248140. Tel.0135 2412018 Email: vinita_puneet@vsnl.net