Emergency Myomectomy during Pregnancy: A Case Report

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Abstract.

A 25 year old primigravida at 17 weeks gestation, whose pregnancy was complicated by uterine fibroid, is presented. Physical signs and ultrasonography suggested ovarian malignancy complicating pregnancy. Exploratory laparotomy done with the surgeons revealed a degenerated, ruptured, giant mass that weighed 11.6kg. The mass was attached to the right lateral side of the uterine fundus, by a thick and short pedicle. It was also adherent to the infracolic omentum, the pelvic and abdominal parietal peritoneum. Histopathological diagnosis was degenerated uterine fibroid. Pregnancy, labour and puerperium were uneventful, with a spontaneous vertex delivery of a life male baby.

Key Words: Pregnancy, Uterine Fibroids, Myomectomy [Trop J Obstet Gynaecol, 2005, 22: 79-80]

Introduction

Uterine fibroids complicating pregnancy occur in 0.3%-3.9% of cases.[1] Most however are asymptomatic, although 10-30% of cases may present with symptoms.[2] Behavior of myomas during pregnancy is variable.[3] Diagnosis may be difficult especially when associated with complications. Myomectomy during pregnancy is a dangerous procedure and thus, is rarely done. In this report, we present a rare situation where a giant, degenerated ruptured uterine fibroid mimicking ovarian malignancy, complicated pregnancy. Emergency myomectomy, although a very risky procedure, was done in other to preserve the life of the mother and her fetus.

Case History

Mrs. U. A., a 25 year old primigravida, married to a pastor was referred to our oncology unit by a consultant Obstetrician and Gynaecology in a Federal Medical Centre located in the South Eastern zone of Nigeria. The working diagnosis based on their physical and ultrasound findings was ovarian malignancy in pregnancy.

The pregnancy was uneventful until 10 weeks prior to presentation when she noticed that her abdomen was enlarging more rapidly than she could attribute to the pregnancy. Her last menstrual period was 05/01/03. She was 17 weeks pregnant at presentation. There was associated abdominal discomfort, easy fullness, dyspnea on mild exertion and weight loss. There were no other associated gastrointestinal, cardiovascular, respiratory and renal symptoms.

Physical examination revealed a chronically ill looking woman in mild respiratory distress {RR. 26/min}. She was pale, anicteric and afrebrile. There was no peripheral oedema or lymphadenopathy. The respiratory and cardiovascular systems were normal. The abdomen was grossly distended. A 36 week sized smooth surfaced, partly cystic partly solid, mass was noted. One could not get below the mass. Pelvic examination did not revealed any further signs.

Her haemoglobin was 7.0g/dl. The white cell, platelet, liver function test, serum electrolyte urea and creatinine, urinalysis, urine microscopy culture and sensitivity were normal. Chest x-ray was normal. Ultrasonography showed a bulky uterus, harboring a singleton pregnancy sac, with a life fetus, at 17 weeks gestation. The peritoneal cavity was studded with large cystic and septate mass with some solid components. The features suggested serous cystadenocarcinoma of the ovary in pregnancy. There was no ascites and no metastatic deposits seen on the liver.

Bowel preparation was done and exploratory laparotomy performed with the general surgeons. These were the findings; mild haemoperitoneum, a partly cystic, partly solid, ruptured mass that was attached to the pregnant uterine fundus by a thick pedicle as shown in the photograph. It was also adherent to the parietal peritoneum and infracolic omentum. There were no intraabdominal deposits. The uterus corresponded to 17 weeks gestation; the tubes and ovaries were normal. The mass, which weighed 11.6kg, was carefully excised with minimal handling of the uterus. Estimated blood loss was 2.5 litres. She had 3 pints of blood preoperatively, 5 pints intraoperatively and 3 pints post operatively. She was placed on antibiotics, tocolytics, analgesics and sedatives.

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She made good post operative progress. Histopathological diagnosis was leiomyoma with red degeneration and no evidence of malignancy. Pregnancy was carried to term with a spontaneous vertex delivery of a live male baby that weighed 3.6kg. She had no puerperal complications.

Discussion

Leiomyomas complicating pregnancy are common. Red degeneration that occurred in this case is one of the commonest complications. Other complications include first trimester pregnancy loss, pressure symptoms, premature labour, and premature rupture of membrane, malpresentation, retained placenta, post partum haemorrhage and uterine torsion.

Diagnosis can be difficult especially when complications occur. Ultrasonography is vital as it will evaluate the number, size, location in relationship to the placenta and echogenic structure, thus making it possible to identify women at risk of myoma related complications. Ultrasound however has its own limitations depending on the experience of the sonologist. Pelvic masses complicating pregnancy can sonographically be confused with ovarian masses, molar pregnancy, missed abortion, bowel abnormalities or even fetal head, as uterine fibroid. In this case, a giant, degenerated ruptured uterine fibroid was sonographically diagnosed as ovarian malignancy complicating pregnancy by two experienced consultant radiologists. Doppler studies and magnetic resonant imaging where available may be superior to ultrasound in evaluating pelvic masses. However definitive diagnosis can only be made after exploratory laparotomy and histology. This case was referred to us by a consultant gynaecologist with a working diagnosis of ovarian malignancy in pregnancy. Clinical and radiological assessment did not dispute this fact. Ensuring stable haematogical,renal and hepatic status, contributed to our successful outcome. Prompt and adequate blood replacement and careful dissection of the tumour without handling the pregnant uterus also contributed.

Myomectomy was performed at a gestational age of 17 weeks and pregnancy, labour and puerperium were uneventful. Although there was minimal handling of the pregnant uterus, possible premature contractions were prevented by using tocolytics, analgesics and sedatives. Intramural or submucosal fibroid complicating pregnancy would have been more difficult to handle. The massive blood loss that occurred in this patient is an inevitable complication of myomectomy in pregnancy. Massive blood loss can also occur while performing myomectomy during caesarean section. Myomectomy under these conditions is thus not advised unless complications occur, and must be performed by an obstetrician with considerable experience. The need to have efficient blood banking facilities to enable prompt and adequate replacement can thus, not be overemphasized. When cases are carefully selected and adequate precautions taken, successful myomectomy can be achieved.[4,5,6,7]

It is a known fact that uterine fibroids are more common in Negroes. It is thus not surprising that uterine fibroids are commonly seen in association with pregnancy in our environment. However to discover a huge fibroid that weighed as much as three average sized fetuses sitting on a 17 week pregnant uterus, without causing pregnancy related complications is a rare event. Exploratory laparotomy and histology gave hope of life and a successful pregnancy to the patient, allayed the fears and anxiety of medical personnel and gave God glory for his wisdom.

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