# Rupture of the Pregnant Uterus in an Unbooked Primigravida: a Case Report

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#### **Abstract**

Uterine rupture is a life threatening complication in pregnancy in developing countries. While multiparity is a commonly associated factor, primigravida are said to be 'immune' to uterine rupture. We present a case of uterine rupture in an unbooked primigravida who had massive bolus doses of intravenous oxytocin in the presence of prolonged obstructed labour and pelvic contraction. Operative findings include a male fresh stillbirth weighing 3.8 kg. and a transverse uterine rupture at the lower segment. Peritoneal lavage and repair of the rupture without bilateral tubal ligation were done.

Key Words: Uterus, Rupture, Haemorrhage, Primigravida. [Trop J Obstet Gynaecol, 2002, 19: 49-50]

#### Introduction

Rupture of the gravid uterus remains one of the most disastrous complications of labour <sup>1,2,3</sup>. It is generally accepted by most authors that multiparity is one of the vital factors responsible for ruptured uterus in our environment <sup>2,3,4,5,6</sup>. This is attributed mainly to weakened muscle fibres and scarring from previous labours and deliveries <sup>5</sup>. Spontaneous rupture in a primigravida is considered to be extremely rare <sup>1,5</sup>. We present a case of rupture of the pregnant uterus in an unbooked primigravida managed at Wesley Guild Hospital, Ilesa, Nigeria.

### Case Report

The patient Mrs. I. F., a 25-year-old unbooked primigravida at 39 weeks of gestation, was referred from a private hospital at Efon-Alaye on 11<sup>th</sup> May, 2001 on account of prolonged labour and three episodes of fainting attacks. She had laboured at home for about 24 hours and, following her inability to deliver, went to the source of referral where she was encouraged to bear down at full cervical dilatation. After 2 hours in the second stage of labour, she was given three bolus doses of 10 international units of intravenous oxytocin at 5-minute intervals. After the third dose, she fainted and was then rushed to our hospital.

On presentation, she had a short stature (height 1.40 metres). She was pale, dyspnoeic and tachypnoeic. Her blood pressure was 120/90 mmHg, pulse rate 120 beats per minute and the respiratory rate 34 cycles per minute. Abdominal examination revealed generalized guarding and tenderness. The fetal parts were easily palpable. There were no fetal heart tones and no palpable uterine contractions.

Vaginal examination revealed a grossly contracted pelvis, fully dilated cervix and severe caput

succedaneum. A diagnosis of suspected uterine rupture from a prolonged obstructed labour and injudicious use of oxytocin was made. She was resuscitated with intravenous antibiotics, fluids and analgesics. She had exploratory laparotomy under general anaesthesia. Operative findings include transverse rupture of uterus in the lower segment and a fresh stillborn male infant weighing 3.8kg. She had two units of compatible blood transfused intraoperatively. She had peritoneal lavage and repair of uterine rupture without bilateral tubal ligation. The post-operative period was uneventful. She was counselled on the nature of her problem. She was advised to book early for antenatal care and hospital delivery in subsequent pregnancies. She was then discharged home on the twelfth day after surgery in a satisfactory condition and given an appointment to come to the Family Planning Clinic.

## Discussion

Rupture of the gravid uterus continues to be one of the serious life-threatening complications of pregnancy <sup>1,2</sup>. Unfortunately, as occurred in this woman, rupture of uterus is more likely to occur and to be more serious threat to life in the rural areas where obstetric care is often limited and transportation scarce <sup>6,7,8</sup>.

Nulliparous women are generally considered 'immune' to having uterine rupture <sup>1,2</sup>. However, this unbooked primigravida had uterine rupture following injudicious use of oxytocin in the presence of prolonged obstructed labour and pelvic contraction.

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In two cases previously reported in the literature <sup>6</sup> one had gross cephalopelvic disproportion and the uterus ruptured at home while the second patient ruptured in the hospital after prolonged use of oxytocin. This underscores the need for adequate monitoring of nulliparous women in labour with the partograph and for caution with regard to the use of oxytocin <sup>1</sup> Apart from misuse of oxytocin, previous uterine curettage has been suggested as an aetiological factor in some nulliparous women with uterine rupture <sup>1,5</sup>. There was however no history uterine curettage in this patient.

Due to the young age of this patient, her parity, and the nature of the rupture, a decision was taken to repair the rupture without tubal ligation <sup>1, 7</sup>. The unfortunate problem is that women involved in

uterine rupture are the least likely to return for obstetric care in the next pregnancy and labour may end in death, <sup>6,7,8</sup>. This patient was therefore adequately counselled on the nature of her problem and the need for early booking for antenatal care and hospital delivery in subsequent pregnancies.

Prevention of this catastrophe requires provision of antenatal care to all pregnant women and delivery in approved health facilities. The health workers need regular retraining and update courses in the diagnosis and management of labour especially on the use of partograph and oxytocin. The pregnant women also need to be educated on the importance of caesarean section in the reduction of maternal and perinatal morbidity and mortality.

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