RUPTURE OF A PREGNANT UTERUS IN A PRIMIGRAVIDA: A CASE REPORT

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Abstract

Uterine rupture is a common obstetric complication in developing countries. Primigravidity is now commonly associated with uterine rupture. We present a case of uterine rupture in an unbooked primigravida who had induction of labor with oxytocin and was given 50ug of misoprostol about 3 hours after commencing oxytocin when it was adjudged patient was not contracting well. Operative findings include a female fresh stillbirth weighing 3.4kg partly in the peritoneal cavity, a transverse uterine rupture at the lower segment, hemoperitoneum of approximately 2 liters. The peritoneum was lavaged and repair was done without bilateral tubal ligation.

Introduction

Ruptured uterus is an unending obstetric disaster in the developing countries[1,2]. The incidence in our centre is 5.38/1000 deliveries[1]. One of the risk factor for uterine rupture is multiparity[3,4.] This is usually attributed to weakened muscle fibers and scarring from previous labor and deliveries[4]. We present a case of uterine rupture in a primigravida following misuse of oxytocin and misoprostol in labor.

Case Report

Mrs. A.A is a 26-year old auxillary nurse and a primigravida referred from a private hospital at 41 weeks gestation on account of dizziness, generalized abdominal pain and collapse. She was induced on account of postdatism in the private hospital where she worked. She had cervical ripening done a day prior to presentation. When she was examined around 9am the following morning, the intracervical catheter was found in the vagina. Induction was said to have been commenced with 5IU of oxytocin in 5% dextrose water around 10am. Misoprostol 50ug was inserted in the posterior fornix of the vagina about 3 hours after commencing the oxytocin infusion when the contractions were felt to be inadequate. Few hours after, she complained of generalized abdominal pain and dizziness. She eventually collapsed and was then referred to our facility.

On presentation, she was pale with cold clammy extremities, dyspneic and tachypneic with a pulse rate of 130 beats/min, small volume; blood pressure was 80/50mmHg. Abdominal examination revealed generalized tenderness with guarding. There were no palpable contractions, the fetal parts were not easily palpable and there were no fetal heart tones.

Vaginal examination revealed bloodstained vulva and vagina, the cervix was 9cm dilated and presenting part was vertex at station 0. There was minimal caput and moulding.

A diagnosis of suspected uterine rupture from injudicious use of oxytocin was made. Immediate resuscitation with intravenous fluids –normal saline and antibiotics were commenced as preparation was made for an urgent laparotomy. She had 2 pints of blood crossmatched ready for surgery.

Operative findings include; 1.5L of hemoperitoneum, transverse rupture of the uterus in the lower segment and fresh stillborn weighing 3.4kg. She had 2 pints of compatible blood transfused intraoperatively. She had peritoneal lavage and repair of the uterine rupture without bilateral tubal ligation. The post-operative period was uneventful. She was counseled on the nature of her problem and advised to register early for antenatal care and hospital delivery during her subsequent pregnancies. She was discharged to the family planning clinic two weeks after surgery.

Discussion

Rupture of the gravid uterus continues to be a major problem in the developing world and most times life-threatening[2].

Nulliparous women are generally considered "immune" to having uterine rupture[2,5]. However, the patient as presented had uterine rupture due to the injudicious use of oxytocin and prostaglandin. The use of oxytocin for the induction of labor has been known over the years to be effective and it is usually advised to allow for a period of up to 6 hours after stopping oxytocin before commencing misoprostol or vice-versa. This is to avoid a synergistic effect of oxytocin and misoprostol, with the resultant hyperstimulation of the uterus that sometimes lead to its tetanic contraction and eventual rupture.

In the four cases previously reported in the literature, two followed injudicious use of oxytocin, one followed external cephalic version for breech and the fourth one followed gross cephalopelvic disproportion[6]. Apart from misuse of oxytocin, previous uterine curettage has been suggested as an etiological factor in nulliparous women with uterine rupture[2,3]. Patients with previous cornual ectopic pregnancy also stand a risk.

Some controversies still exist among obstetricians as to the operative procedure of choice for treating ruptured uterus[7,8,] but unarguably, what is done is dictated by what is seen at laparatomy. Our patient had a transverse rupture of the lower segment of the uterus; hence, she

had a meticulous repair and was well counseled before she was discharged.
This case highlights the importance of proper supervision of labor by well-trained personnel and cautious use of oxytocics even in the primigravida.

References

1. **Fabanwo A , Akinola O , Tayo A, Akpan E**. Rupture of the gravid uterus: A never ending obstetric disaster. The Ikeja experience. *The Internet Journal of Gynaecology and Obstetrics*. 2009 vol 10 no 2

2. **Ola RE, Olamijulo JA**. Rupture of the uterus at the Lagos University Teaching Hospital, Lagos, Nigeria. *West African J Med.* 1998, 17(3): 188-193

3. **Konje JC, Odukoya OA, Ladipo OA**. Ruptured uterus in I badan. A 12-year review. *Int J Obstetrics and Gynaecology*. 1987: 192-196

4. **Faleyimu BI, Ogunniyi SO, Makinde OO**. Rupture of the gravid uterus in Ile-Ife, Nigeria. *Trop Doctor*. 1990; 20:188-189

5. **Kevi M, Williams KG, Achilles A**. Spontaneous rupture of the unscarred uterus. *Am J Obs Gynaecol*. 1995, 172:1851-1856

6. **Mohammed K**. A 5-year review of Rupture of the pregnant uterus in Harare, Zimbabwe. *J Obst Gynaecol*. 1987; 7:192-196.

7. **Makinde OO, Akinyemi SA**. Review of Ruptured pregnant uterus. *Trop J Obst. Gynaecol*. 1990;8:52-54

8. **Onwudiegwu V, Okonofua FE**. Comparison between subtotal and total emergency obstetric hysterectomies. *Orient J Med*. 1993; 5:122-124