SPONTANEOUS FUNDAL UTERINE RUPTURE DURING PREGNANCY
AN OBSTETRIC DISASTER

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ABSTRACT
Uterine rupture is a catastrophic complication with a high incidence of fetal and maternal morbidity and mortality. The median incidence of uterine rupture was 5.3 per 10 000 births (Hofmeyr et al., 2005). Risk factors include previous uterine scar, misuse of oxytocic drugs, grand multiparity, cephalopelvic disproportion or transverse lie, obstetrical maneuvers especially if it is done on a scarred uterus (Ahmadi et al., 2003). It can also occur, though rarely, during pregnancy, mainly if the patient had a uterine scar on the upper uterine segment or uterine perforation. Due to the rarity and importance, we hereby, report a case of spontaneous fundal uterine rupture in a previous lower segment caesarean scarred uterus at 35 weeks of gestation. This case report shows that the past history of uterine curettage is a risk factor for the presence of uterine scar.

Keywords: Uterine Rupture, Fundal, Uterine Curettage

CASES
26 yr old female G3P1+1 was admitted at 35weeks of gestation as an unbooked case in an emergency room. She had a previous history of lower segment caesarean section 3 yr back for fetal distress and one past history of uterine curettage for 12 weeks of missed abortion one year prior. A day prior to consultation, she had severe acute lower abdominal pain that awakened her from sleep followed by aggressive fetal movement at home. She arrived at the emergency room 12 hrs later due to abdominal distention associated with severe fatigue and loss of fetal movements. On admission the patient was uncomfortable, blood pressure 90/70 mm of Hg, pulse 130 beats/min, temperature 37 ºC and respiratory rate 16/min. On examination her abdomen was distended and tender. The fetus was in a longitudinal lie and the fetal head was 4/5 palpable with no fetal heart sounds. On per speculum examination mild bleeding present coming through the os. Vaginal examination showed 1cm long and 3 cm dilated cervix, posterior, thick with blood stained liquor amnii. Uterine scar dehiscence complicating pregnancy was diagnosed, and the patient was immediately transferred to the operating theater. Per-operative haemoglobin was 8.8g/dl. Under G.A. and antibiotic coverage a midline subumbilical paramedian incision was made on previous scar. Intraoperative findings were haemoperitoneum of altered blood of 1500 c.c, with intact previous scar. A dead male baby of 2.8kg delivered by lower segment caesarean section with normal morphological features. No skin peeling was present. The placenta was found fundoanterior protruding through the uterine tear and partially separated in the uterine cavity. There was no retroplacental clot present. The uterus at the fundus had a irregular with ragged margins tear of about 4cmsx4cms with placental tissue attached, which was bleeding (Figure 1 and 2). The uterus was sutured in 2 layers with vicryl no.1 and fundal tear was repaired after freshening the edges. Due to large fundal rupture and associated risk of rupture in subsequent pregnancy bilateral tubal ligation was done using the Pomeroy technique. During surgery she was transfused 2 units of blood. Postoperative management was without complications. Placental histopathology showed only focal degenerative changes. Postoperative haemoglobin was 10 g/dl and the patient was discharged from the hospital 5 days after the surgery.

DISCUSSION
Haemorrhage in general is still the cause of maternal death in cases of ruptured uterus (Scio-Ojeme and Okonofua, 1997). In our developing country there is still a high percentage with an average of 60 cases per year in a hospital with about 7000 deliveries per year (Jawaharlal Nehru Medical Hospital, A.M.U.,
Case Report

Our patient was lucky enough to survive as she had many factors exposing her to the risk of rupture uterus. She is a multipara, had a previous history of Caesarean section and uterine curettage. She is illiterate, poor, and lives in a rural area. She did not know about contraceptive methods and had no access to family planning services. If this patient had been educated, she may have sought for early antenatal care, for early diagnosis and management, and this might have prevented the losses of her pregnancies. Thus it is a failure in a chain of events which are collectively responsible for this case.

It has not been documented to assess the incidence of uterine perforation which occur in a dilatation and curettage. Often the accident is not recognized by the surgeon (Murray and Winkdstein, 1951) as in our case. The perforation of the uterus is an ever present possibility in the process of dilatation and curettage (Word, 1960). Scars at the fundus uteri tend to rupture at about 35wks. Tamous et al., (1996) also reported a case of uterine rupture in labour after the patient had repeated curettage (Tannous et al., 1996). Mair treated a similar case with subtotal hysterectomy (Kay, 1955). The incidence of ruptured uterus is still rising at Enugu, Nigeria but maternal mortality, due to uterine rupture continues to fall. The most commonly performed surgery is repair with or without sterilization rather than hysterectomy (Ezegwui and Nwogu-Ikojo, 2005). The case reported here was repaired with bilateral tubal ligation. The misfortune for this patient was in having her pregnancy ended in intrauterine fetal death. The patient lost her chance for further pregnancy. It was very difficult to take the decision of tubal ligation during the operation. Our patient was young and had only one child. In addition to the culture of this woman where, fertility is of the utmost importance in the life of a married women (UNICEF, 1992).

Diagnosis of spontaneous uterine rupture during occurring on a scarred uterus can be made by ultrasound scan in which case there can be protrusion of membranes at the site of scar (Alphen et al., 1995). In case of late presentation, as in our case, there were signs of shock, at that time USG will reveal fetus in an intraperitoneal cavity. In these cases the fetus is already dead and efforts are made to save the life of mother.

In our case the patient came 12hrs after the onset of pain and generalized weakness. She was in a state of shock with previous scarred uterus. Our first diagnosis was uterine rupture. Had our patient reported at the onset of pain, we may diagnosed fundal rupture by USG and surgery may be planned earlier, and we may saved the fetus as well.

Conclusion

Ruptured uterus continues to be a recurring obstetrical disaster in the developing world with its associated mortality and morbidity. The incidence of rupture uterus can be decreased by implementation of maternity health services, acceptance of family planning and adoption of principles of modern obstetrics and sound indication for primary caesarean section. Very rigorous efforts at upgrading the standard of obstetrical care at the primary level is required to stem this tide.
REFERENCES