North Bengal Medical College Journal
Vol 3 No 1 January 2017

Case Report

Pregnancy with Ruptured Caesarean Scar Mark

Monowara Khatun,[1] Beauty Choudhury,[2] Rezoana Parvin,[3] Md Nayeem Ullah[4]

Revised : August 25, 2016 Accepted : October 08, 2016

Abstract

Ruptured uterus is an unpredictable condition to both obstetrician and mother as because it increases morbidity and mortality of mother and foetus. It is not uncommon in our country due to increased prevalence of scar rupture following increased incidence of caesarean section over the years. Ruptured uterus usually occurs beyond 28th weeks of pregnancy. Small rupture to the wall of the uterus in early months is called perforation, either instrumental or due to perforating hydatiform mole. But scar rupture in early months of pregnancy (18wks) is rare and carries grievous consequences to both mother and foetus. Here one case report of pregnancy with scar rupture has been presented that was diagnosed after laparotomy. Diagnosis before rupture by clinical suspicion and ultrasonography, resuscitation and laparotomy is necessary to prevent catastrophe.

***Key words**: Pregnancy, Scar rupture, Laparotomy*

North Bengal Med. Coll.J. 2017; 3 (1) : 53-56

1. *Assistant Professor, Department of Obstetrics and Gynaecology, North Bengal Medical College, Sirajganj*
2. *Registrar, Department of Obstetrics and Gynaecology, North Bengal Medical College Hospital, Sirajganj*
3. *Assistant Registrar, Department of Obstetrics and Gynaecology, North Bengal Medical College Hospital, Sirajganj*
4. *Assistant Professor, Department of Radiology and Imaging, North Bengal Medical College, Sirajganj*

***Correspondence** Monowara Khatun, Email:drmonowaram19@gmail.com*

Introduction

During the past few decades the prevalence has been found to be almost static where as improved obstetric care reduces the rupture from obstructed labour but there has been increased incidence of caesarean section over the years. Incidence of scar rupture is about 0.2-1.5% in the former and about 4-9% in later.[1] The lower segment scar is at greater risk, when the scar integrity is weakened by puerperal sepsis, placental implantation over the scar, high parity, multiple pregnancy, large foetus, hydramnios. Hysterectomy scar behaves like that of classical scar. Myomectomy scar hardly ruptures as wound heals well because the uterus remains quiescent following the operation.

Case Report

A 25 years old female G4P2A1 with 18 weeks of pregnancy, hailing from Dhangara, Raiganj, Sirajganj got admitted in North Bengal Medical College Hospital (NBMCH) on 03.09.2016 with complaints of severe lower abdominal pain for one day. The lady had a previous Intra Uterine Foetal Death (IUD) spontaneously on home delivery or normal vaginal delivary (NVD) at full term about 11 years back. Then her 2nd issue was delivered by lower segment caesarean section (LSCS) about 9 years back. An abortion (spontaneous) occured at 12 weeks about 2 years back. According to the patient's statement, she was a regularly menstruating women with average flow and duration. Her LMP was on 26.04.2016 and accordingly her expected date of delivery (EDD) on 03.02.2017. Her pregnancy confirmed by early ultrasonogram. It was her planned pregnancy but she was on irregular antenatal check up. Her pregnancy was uneventful up to 18 weeks. Then she developed sudden lower abdominal pain for 1 day, which was confined to hypogastrium. Pain was not associated with per vaginal bleeding and not radiated to back or thigh. She had no complaints of dysuria, frequency, excessive vaginal discharge or itching. For this reason she got herself admitted into this hospital for further management. With due consent and maintaining adequate privacy, examination was done on 03.09.2016, found her anxious but cooperative. She was an average body built, mild anaemic and non icteric. She was normotensive (BP-120/80 mm of Hg) pulse was 78 beat/min, temperature was normal and oedema was absent. Breast showed pregnancy changes. Cardio-respiratory systems were found normal.

Abdominal examination revealed that abdomen was uniformly enlarged. Symphysio fundal height (SFH) was 18 weeks size, which corresponds with her gestational age. Foetal movement was present. Tenderness present on scar margin. Per vaginal examination revealed that there was no per vaginal bleeding and no any other significant abnormalities. Routine

investigation was done. Her blood group was A positive (+ve), Hb%-11gm/dl, RBS-4.5mmol/l, HBsAg positive, VDRL nonreactive. Ultrasonogram of pregnancy profile revealed a significant information about her pregnancy. It was 18 weeks pregnancy, the foetus was alive, the placental location was fundal, amniotic volume was normal but amniotic sac was protruded through the uterine scar which looks growth like structure outside the anterior uterine wall (Figure 1 & 2). Repeat ultrasonogram was done for reconfirmation by another sonologist which revealed same reports. After counselling the patient's guardian about the fate of the case and she was taken for immediate laparotomy followed by hysterotomy. On opening the abdomen, scar margin of previous lower segment caesarean section (LSCS) was found ruptured and amniotic membrane bulging through the ruptured scar of uterine wall. Her postoperative period was uneventful and she was discharged on 5th post operative day in good condition.

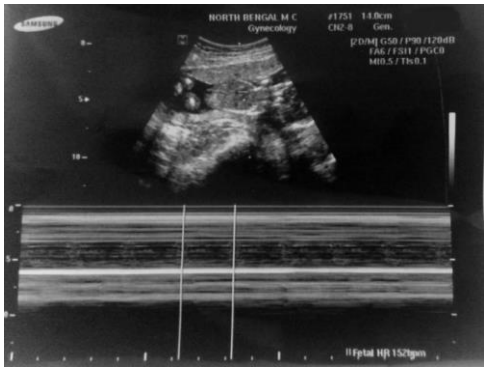

Figure 1: Ultrasonogram of 18 weeks live pregnancy

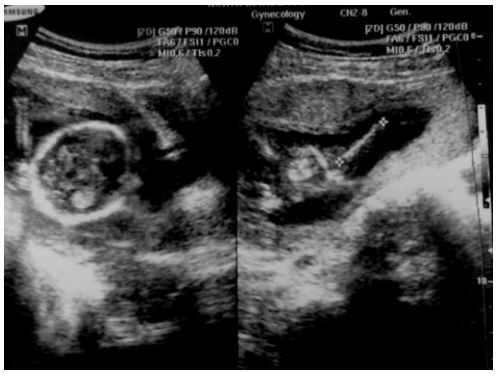

Figure 2: Repeat ultrasonogram of 18 weeks live pregnancy

Discussion

The prevalence of reptured uterus varies from 1:2000 to 1:200 deliveries.[1] The identification or suspicion of uterine rupture is a medical emergency and must be followed by an immediate and urgent response from the obstetrician. An emergency laparotomy is usually required to save the patient's life. A complete uterine rupture is very unlikely now a days. There is no clear cut predictive indicator for rupture uterus. However several factors are responsible for weak scar such as – infections are found to be responsible factors for higher maternal C/S complications.[4,5] Other predisposing foctors involved are improper haemostasis at the time of surgery, imperfect co-optation of uterine margins at the time surgery, extensions of the angles of uterine incision, over distension of the uterus. When uterine rupture is diagnosed or strongly suspected, surgery is necessary. Previously most cases of uterine rupture was

managed with hysterectomy. Now-a-days most cases are managed by controlling the bleeding surgically and repairing the defect.

To identify the previous caesarean scars the following investigations can be done.

- Hysterogram in interconceptional period. Radiographic imaging of the uterus which shows uterine defects in the lateral view (wedge depression >5mm).
- Ultrasound imaging use for visualisation of scar defects and measurement of scar thickness that depends on the quality of ultrasound and skills of the sonologist.
- MRI.

According to study by Rozenberg P et al.[2] cut off value of 3.5 mm, on ultrasound measurement of scar thickness at 36 weeks of gestation was observed to show negative predictive value of 99.3% for scar rupture.[2]

Different studies showed different cut off values for estimating the strength of the scar.[3] Therefore presently there is no clear cut off value of scar thickness to indicate the strength of the scar. Risk of rupture is high (9%) when the full thickness was less than 2.3mm. TVS (Trans vaginal sonogram) seems to be more accurate than trans abdominal sonography, yet it is not commonly used.[3]

Conclusion

Early diagnosis of scar dehiscence or rupture is needful for prompt laparotomy and resuscitation to reduce morbidity and mortality in mother and foetus.

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