

Ruptured uterus - a rare presentation

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Abstract

Ruptured uterus is one of the most serious complications of pregnancy and labour and carries a high maternal and perinatal mortality. It is one of the main causes of maternal mortality in the developing countries whereas this phenomenon is rarely seen in the developed part of the world. Rupture occurs more commonly in labour and in multi gravidas. An interesting case of uterine rupture is being presented - the patient was initially mistaken for Acute Cholecystitis. The main aim of presenting this case is to emphasise that rupture uterus should always be kept in mind in a pregnant woman not in labor with pain abdomen especially in the last trimester of pregnancy.

Keywords: Ruptured uterus; Caesarean section (Classical and lower uterine); Acute cholecystitis

Case report

Mrs X, 35 years old multigravida (P3+O, G4) reported to a private clinic at about 7 pm of 8th July 1996 with complaints of generalized pain abdomen for the past two hours. She was around 34 weeks pregnant, her 2nd and 3rd pregnancies terminated in caesarean section for placenta praevia. All her issues are alive. She was examined by the doctor and was told that she was not in labour and could return home. She was prescribed analgesics and was told to report to hospital in case the pain continued. The pain persisted despite the medication, so she reported to Prasutigriha where she was admitted for observation. She was not in

labour and her vitals were stable at that time. She complained of increasing pain, more in the upper right quadrant. Suspecting her to be suffering from Acute cholecystitis, she was sent to Bir Hospital for the needful management. From the emergency department of Bir Hospital she was referred to T.U. Teaching Hospital as there was no vacancy there at that time and also because the patient could be under the joint care of both surgeons and the obstetricians. She was received in the emergency unit of the Teaching Hospital in the late night of 8th July 1996 with the following findings:

General condition stable, Patient comfortable. BP 100/70 mm hg, Pulse 98/mt regular, average volume. Temperature 100oF. Hydration - maintained. History of vomiting + once, Generalized abdominal tenderness +, Murphy's sign +ve. Uterus - 34 weeks, relaxed, foetal lie - longitudinal, cephalic presentation, free

FHR - 144/mt regular

Per vagina - Cervix tubular, Os closed, posteriorly directed, leaking/bleeding-nil

Investigations: Emergency Hb 9.8 gm %, Urine R/M - pus cells +ve

With the above mentioned findings, the patient was admitted in the Maternity ward where she was brought in around 1 am of 9th July 1996 with the diagnosis of "Pregnancy with acute cholecystitis – not in labor". Treatment given to her - Iv fluids, antibiotics, planned surgical evaluation in the morning. The following morning the patient's condition started to deteriorate. Her BP fell to 80/60 mm hg, pallor (++), pulse rate 126/mt, low volume an increased abdomen tenderness. With the above mentioned findings, Uterine rupture was suspected and laparotomy planned immediately. Haemaccel was infused and grouped and crossmatched blood arranged for transfusion.

After the usual preparation, cleansing and draping, laparotomy was carried out under G.A.

Findings

- 1) Haemoperitoneum ++
- 2) 1/2" rent in the uterine fundus, placental tissue seen protruding.
- 3) Previous scar intact at the lower uterine segment.
- 4) No other bleeding site accounting for haemoperitoneum.

Procedure done

Immediate extension of the rent (vertically) done (there was no need of incising the lower uterine segment scar as it was intact). This seemed the quickest way to deliver the baby in view of the patient's poor general condition.

Baby note

A live male baby with Apgar 2/10 at birth and 4/10 at 5 minutes was delivered by breech. Birthweight was 2.1 kg. Unfortunately the baby died twenty four hours later as a result of prematurity. The uterine rent was closed with No. 2 catgut suture material, bilateral tubal ligation was done, peritoneal cavity cleaned of blood clots and haemostasis secured. The abdomen was closed the usual way. The patient's post operative period was uneventful. Her stitches were removed on the 10th post operative day and she was discharged the same day.

Discussion

Almost all cases of rupture uterus in pregnancy or labour occur in the uterus which had been previously scarred - by caesarean section (classical/lower uterine) Myomectomy, hysterotomy, dilatation and curettage, or IUCD insertion. It may occur after certain manovres like manual removal of placenta, application of high forceps (outdated nowadays) internal podalic version or any destructive operations on the foetus. It may rupture following injudicious use of oxytocin or in a congenital malformed uterus especially at the site of fusion. There have been many instances of uterine rupture of reason unknown.

This case was initially mistaken for Acute Cholecystitis because she had a positive Murphy's sign, fever (100f) and vomiting. There was no lower uterine scar tenderness and the uterine contour was maintained. The foetal heart sound was regular ranging from 140 to 144/mt and the patient's vital were a steady. There was no haematuria or vaginal bleeding or maternal tachycardia - which is generally found in patients with lower uterine incision scar rupture. The reason for upper abdomen tenderness could be due to stretching of the fundal myometrium. There was no other reason to support upper segment rupture. When the patient recovered from the operation, a detailed history was taken and the patient finally admitted to having had pregnancy terminated (of 8 weeks) one year prior to conceiving this pregnancy (this fact was kept hidden from her husband). This minor procedure could have caused a small fundal perforation resulting in weakening of the myometrium which ruptured during this pregnancy.

Spontaneous rupture of the uterus during pregnancy is extremely rare in a primigravida. Felmus *et al* 1 in a review of spontaneous rupture during pregnancy in an apparently normal uterus, found only 12 primigravida in 121 cases recorded.

In Multiparae, rupture during pregnancy generally involves the fundus of the uterus, as reported by Canney² and Delfs and Eastman³ in their analysis of rupture of the uterus. In the present case the patient was a multigravida and the rupture had involved the fundus.

In a study by ESSIG, TETRIS and ULLERY* of 11 cases of uterine rupture, 7 gave a positive past history of dilatation and curettage. CHEN-LH; LAI-SF *et al* (1995) reported an incidence of 0.8/1000 uterine perforations during dilatation and curettage of the pregnant uterus.

Conclusion

Any pregnant woman giving a history of increasing abdominal pain especially if she is not in labour should be thoroughly examined to rule out uterine rupture. This suspicion should be even higher in multi gravidas, and in woman with previous scarring following caesarean delivery or any other surgical procedure. Even minor procedures like dilatation and curettage or IUCD insertion can result in silent perforation with rupture in the subsequent pregnancy.

The above mentioned case was interesting because:

1. She was initially diagnosed as a case of Acute Cholecystitis.
2. The previous lower uterine scar was intact.
3. She had pregnancy termination of 8 weeks gestation just one year prior to this conception.

Acknowledgement

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References

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