



RUPTURE OF UTERUS (FUNDUS); SPONTANEOUS RUPTURE OF AN UNSCARRED UTERUS (FUNDUS), AT 35 WEEKS 01 DAY OF GESTATION OF A MULTIGRAVIDA.

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ABSTRACT... Rupture of a gravid uterus is a surgical emergency. Predisposing factors include a scarred uterus. Spontaneous rupture of an unscarred uterus during pregnancy is a rare occurrence. We hereby present the case of a spontaneous complete uterine rupture at a gestational age of 35 weeks 01 day in a 25 years old patient. The case was managed at the Civil Hospital Bahawalpur. She had past history of one uterine curettage for endometrial polyp one year back. She presented with mild abdominal pains of sudden onset. After conservative management for 10 hours in hospital she suddenly developed severe abdominal pains with P/V bleeding. On ultrasound scan, uterine rupture was diagnosed and an emergency laparotomy was done. The ruptured amniotic sac with baby and placenta were found in the peritoneal cavity with rupture of the uterine funds. Spontaneous uterine fundus rupture usually occurs when there is an upper segment uterine scar. This case report shows that past history of curettage is a risk factor for the presence of uterine scar.

Key words: Repture of uterus, Uterine scar, Multigravida.

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INTRODUCTION

Ruptured uterus is an obstetric and surgical emergency that can lead to maternal or fetal death. The maternal and fetal prognosis is most of the time bad especially if rupture occurs in an unscarred uterus. Uterine rupture happens usually during delivery. The causes include misuse of ox toxic drugs, obstetrical maneuvers especially if it was on a scarred uterus. Uterine rupture can also occur, though rarely, during pregnancy, notably if the patient had a uterine scar on the upper uterine segment (corpus) as the case of patients who have had a previous uterine rupture, classical caesarean section or uterine perforation.

Spontaneous rupture of an unscarred uterus is very rare. We hereby report a case of spontaneous uterine rupture at 35 weeks and 01 day of gestation in a patient who has never had a previous uterine surgery, but who has had uterine curettage once for endometrial polyp.

CASE

The patients is 25 years old and married. At pre-

sentation on the 29th of October 2014 at 5:30 pm, she was Gravida 3 Para 2 with a gestational age of 35 weeks and 01 day. Her blood group is O rhesus positive. The pregnancy was un-monitored with only a single ultrasound scan done one day back at a private facility.

She presented at the Civil Hospital Bahawalpur with complaints of fatigue and mild abdominal pains that started 7 days prior to consultation. She has had 2 full term pregnancies 3 years and 5 years back respectively which all ended in normal deliveries at home. The birth weights of babies ranged between 2900 and 3200g. On physical examination, her general state was average. Her temperature was 98.6 degrees F, blood pressure was 110/70 mmHg and the pulse was 84 beats/min. On physical examintion of the abdomen was mildly tender. On USG the fetus was alive, cephalic with longitudinal lie, BPD was 86.9 mm, FL 67.8mm, POG 35weeks 01 day, Placenta was anterior and upper and Liquor was adequate. On P/V she was in early labor. Admission CTG was reactive with FHR of 137-149bpm. Diag-

nosis of Pre-term Labor was made and to colysis was started with tab. Adalat-retard. Steroid Cover was given and hydration was maintained. After 2-3 hours, the abdominal pains got settled and patient was in stable state. CTG done at 11:00 pm was also reactive.

Later in the night at 4:30 am, the patient did the complaints of severe abdominal pains followed by severe P/V bleeding. On examination Temp was 98.6 degrees F, BP was 90/60, Pulse was 124 beats /min and there was generalized abdominal tenderness. Emergency USG revealed an empty uterus which had a tear at the fundus. The fetus was in the abdominal cavity in transverse lie with no heartbeat. Diagnosis of ruptured uterine pregnancy was made and emergency laparotomy was done.

Pre-operative hemoglobin level was 10.7 g/dl. Under general anesthesia and antibiotic coverage, a mid- line sub umbilical incision was made. As findings there was a ruptured sac of amniotic fluid containing a dead fetus and the placenta in the abdominal cavity above the uterine fundus. There was hemo-peritoneum made up of fresh blood. After removal of the baby and placenta from the abdominal cavity and suction of the hemo-peritoneum of about 1000cc, the uterus was about 16 weeks pregnant and had a tear at the funds from one cornu to the other. The uterus was conserved and sutured in multiple layers with Catgut # 2 and bilateral tubal ligation was done .A drain was placed in the POD. Muscles and Peritoneum were stitched with catugut# 1, rectus with vicryl and skin was stitched with silk. During surgery 500 ml of whole blood group O rhesus positive was transfused to the patient, and another 500 ml was transfused after surgery.

Postoperative management was without complications. Post-operative hemoglobin was 9.9 g/dl and the patient was discharged from the hospital 4 days after surgery.

DICSCUSSION

Rupture of a gravid uterus is one of the worst obstetric emergencies in which the life of both the



mother and the fetus are in danger. The incidence ranges from between 0.2 to 0.6 %.

Factors that can predispose to uterine rupture are multiparty, advanced maternal age, a scarred uterus, a big fetus, mal presentation, a contracted pelvis, the misuse of oxytocic drugs, obstetrical maneuvers like external cephalic or internal podalic version, instrumental deliveries. Uterine rupture can also occur without these factors.

In our case, the patient was multiparous and she has had 1 previous episode of uterine curettage for endometrial polyp 1 year back. Uterine rupture in multiparty occurs usually during labour. We think that our patient may have had uterine scar from an unnoticed incomplete or complete uterine perforation during curettage. The perforation may have been situated at the uterine fundus and subsequently the products of conception of the current pregnancy may have embedded itself in that region, so that when there was continuous distension of the uterus with evolving pregnancy, there was a stretch of the weakened area leading finally to rupture and protrusion of the fetus with the placenta into the peritoneal cavity.

Diagnosis of spontaneous uterine rupture during pregnancy occurring on a scarred uterus can be made by ultrasound scan in which case there

can be protrusion of membranes at the site of the scar. If possible we should carry on an external electronic fetal monitoring in each case where there is abdominal pain occurring on a pregnancy because in cases of uterine rupture there will be fetal heart rate abnormalities. In the case of late presentation as in our case, there are abdominal pains and signs of shock, at which time ultrasound scan will reveal an intra-peritoneal pregnancy. In these cases the fetus is already dead and efforts are made to save the mother. The incidence of rupture of an unscarred uterus varies between 1/8 000 and 1/15 000 pregnancies. Most of them occur during labor and can even be due to the application of fungal pressure.

Because the medical staff is not always prepared for the eventuality of a uterine rupture when there is no post-surgical scar and because of rapid bleeding in case of uterine rupture, the prognosis for both the mother and the child is very bad. In our case the patient came 7 days after the onset of pains. We found a dead fetus in the peritoneal cavity. There was a massive pool of hemo-peritoneum of about 1000 ml. Since all the products of conception were expelled, the uterus became as small as 16 weeks gravid uterus and this retraction phenomenon reduced the intraperitoneal bleeding so that with time, the patient compensated the blood loss by fluid retention and tachycardia. That is why the blood pressure was normal. We think that if the products of conception were not completely expelled, the uterus may have remained bigger and the bleeding may have become excessive and may have killed the patient. The site of the uterine rupture was closed, 500cc of blood was transfused to the patient per operatively and 500 ml post operatively. Bilateral tubal ligation was done after proper counseling of the patient and her husband. We think that the good evolution of the post-operative period was due firstly to the retraction phenomenon of the uterus that limited the intra peritoneal bleeding, secondly to the antibiotic coverage and lastly to the 2 pints of blood transfusion.

CONCLUSION

Uterine rupture occurring on an unknown scarred uterus is sometimes an unpredictable event. It is associated with very bad maternal and fetal prognosis. Usually it occurs during labor, but as in our case it can sometimes occur during pregnancy. Our case report showed that past history of curettage should be considered as a risk factor for uterine rupture even during pregnancy because there could be an unnoticed uterine perforation or uterine weakening by the curettage. This case report shows that when there is past history of curettage, an abdominal pain occurring on a pregnant uterus should be seriously managed. Ultrasound scan and external electronic fetal

Monitoring should be carried out rapidly so as to diagnose a uterine rupture as early as possible.

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REFERENCES

1. Van Der Merwe JV, Ombelet WVAM. **Rupture of the uterus: a changing picture.** Arch Gynecol Obstet. 1987; 240(3):159-171.
2. Ahmadi S, Nouira M, Bibi M, Boughi-Zane S, Sadi H, Chaib A. **Rupture utérinesur utérussaingravide.** A propos de 28 cases. Gynecol Obstet Fertil. 2003; 31(9):713-717.
3. AL Salem MH, Makhseed M, Ahmed MA, Gupta M. **Rupture of the gravid uterus experience of the maternity hospital, Kuwait.** Med Principles Pract. 2000; 9:97-105.
4. Enders L.K, Barnhart K. **Spontaneous second trimester uterine rupture after classical cesarean.** Obstet Gynecol. 2000; 96:806-808.
5. Manouana M, Louis O, Lorgeton P, Pettini R, Lameyred D, Meynieu F. **Rupture spontanée, pendant le travail, d'un utérus non cicatriciel sous analgésiepéridurale : à propos d'un cas.** J Gynecol Obstet Biol Reprod. 1995; 24(5):557-560.
6. Bevan JR, Marley NJE, Ozumba EN. **Uterine rupture, placenta percreta and curettage in early pregnancy.** Case report. Br J Obstet Gynecol 1985; 92(6):642-645.
7. Tannous W, Hamou J, Henry-Suchet J., Achard B., Leiaidier C., Belaisch-Allart J. **Uterine rupture duringlabor following surgical hysteroscopy.** Presse Med. 1996;25(4):159-161.
8. Van Alphen M, Van Vugt JMG, Hummel P, Van Geijn HP.

- Recurrent uterine rupture diagnosed by ultrasound.**
 Ultrasound Obstet Gynecol. 1995; 5(6):419-421.
9. Pan H.S., Huang L.W., Hwang J.L., Lee C.Y., Tsai Y.L., Cheng W.C. **Uterine rupture in an unscarred uterus. After application of fundal pressure. a case report.** J
 Reprod Med. 2002; 47(12): 1044-1046.
10. Yeou-Lih W, Tsung – Hsien SU. **Obstetric uterine rupture of the unscarred uterus: a twenty year clinical analysis.** Gynecol Obstet Invest. 2006; 62(3):131-135.



“People will never forget how you made them feel.”

Maya Angelou



AUTHORSHIP AND CONTRIBUTION DECLARATION

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