

# Unscarred uterus rupture diagnosed post vaginal delivery following IOL with dinoproston

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## Objective of the case:

To report a rare case of rupture of unscarred uterus in a multiparous lady, diagnosed post normal vaginal delivery of live baby, following induction of labour with dinoprostone.

## Discussion:

- ❖ Uterine rupture is defined as a disruption of the uterine muscle extending to and involving the uterine serosa, or disruption of the uterine muscle with extension to the bladder or broad ligament.
- ❖ Uterine rupture is known complication in scarred uterus, there are reported case reports in unscarred uterus resulting in delivery by emergency laparotomy with poor fetal outcome.
- ❖ This case is unique in uterine rupture diagnosis at laparotomy post normal vaginal delivery.

## Case report:

27 year P3 with 3 vaginal deliveries and 1 surgical management of miscarriage, diagnosed with obstetric cholestasis at 28 weeks with raised AST and bile acids, on Urso-deoxycholic acid. Growth scans at 28 and 32 weeks normal. IOL booked for 38 weeks. Initial assessment performed by midwife, CTG normal with baseline 140bpm, on VE bishop score of 4.

Dinoprostone induction started at 12:20. Progressed well with spontaneous vaginal Delivery at 00:48. Syntocinon given IM at 00:53. Placenta and membranes delivered by CCT at 00:53. Emergency buzzer at 00:54 for PPH, observations normal, per abdomen uterus well contracted, VE no perineal trauma, ensured no retained products. PPH protocol followed, and haemostasis achieved by 1:17.

At 3:00 noted to be hypotensive and tachycardia. Called for help, patient reported feeling faint, BP continued to drop. Scan performed by Registrar empty uterus deviated to right and large clot seen inferior to uterus Imp ?clot in cervix. Decision to transfer to theatre made. Second MOH call put at 3:36 in theatre. Pack one bloods ordered. Requested Consultant presence. Under general anaesthesia, laparotomy started, and large left broad ligament haematoma noted. Vertical incision given on anterior leaf of broad ligament. 350 mls clots evacuated. UV fold opened and bladder pushed down. Left side of uterus ruptured from cornua to level of UV reflection. Ruptured Left uterine artery ligated with 1 vicryl. Myometrium closed in 2 layers with 1 vicryl. Broad ligament closed with 2 0 vicryl. Haemostasis sutures to serosa with 3 0 PDS. Surgicel and drain inserted. Abdomen closed in layers. Total blood loss 3 litres. 5 units blood, 1 unit platelets, 3 units cryoprecipitate, 4 units FFP transfused. Recovered well post operatively.

## Conclusions:

- ❖ The clinical presentation varies from no symptoms at all (i.e. window representing the dehiscence scar of a previous caesarean section) to severe hypovolaemic shock with intraperitoneal haemorrhage.
- ❖ Another warning sign is cessation of uterine contractions or elevation of the presenting part.
- ❖ Low suspicion of uterine rupture especially in an unscarred uterus can delay diagnosis, with increased likelihood of fetal and maternal morbidity and mortality.
- ❖ Immediate resuscitation using ABCDE is indicated.
- ❖ Senior assistance should be requested and the woman taken to theatre for delivery and repair. Hysterectomy may be necessary.
- ❖ Urology assistance may be required if there is bladder involvement in the rupture.