

A Rare Case of Spontaneous Posterior Uterine Wall Rupture

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Objective

To describe a case of posterior uterine rupture in an unscarred uterus during labour.

Case Study

A 24 year old, P1+1, presents at 36 weeks with spontaneous rupture of membranes. She has a history of an uncomplicated spontaneous vaginal delivery and a surgical termination of pregnancy.

During admission, variable decelerations on CTG prompted transfer to Labour Ward. The patient subsequently developed severe abdominal pain and rectal pressure. CTG showed a prolonged fetal bradycardia. Vaginal examination revealed an unfavourable cervix. The decision was made for a Category 1 Caesarean Section under general anaesthetic.

Routine entry into the abdominal cavity was performed and a healthy live male was delivered. A small extension of the uterotomy was repaired and the uterus then closed in two layers. Continued bleeding prompted uterine exteriorisation, at which point a significant posterior uterine wall rupture extending to the vagina was identified.

Urgent assistance was summoned from the Gynaecology Consultant and attempted repair over hysterectomy agreed. The defect was successfully repaired, bleeding controlled and an intra-abdominal drain inserted. The estimated blood loss was 2300mLs. The patient made a good post-operative recovery and was counselled regarding risks of future pregnancy.

Discussion

Uterine rupture is defined as the loss of integrity involving the full thickness of the myometrium. The majority of cases occur at the site of a previous caesarean section incision, most commonly during vaginal birth after caesarean section. There are extremely few reported cases of posterior uterine wall rupture.

Posterior rupture is a diagnostic challenge as clinical signs may be subtle or absent. The true extent of the rupture may be unclear and only evident intra-operatively. The most common clinical sign of uterine rupture is fetal compromise identified by a pathological CTG trace. Severe abdominal pain persisting between contractions and maternal haemodynamic instability may be present.

If rupture is suspected, immediate maternal resuscitation and laparotomy is required. The operation is influenced by size and location of rupture and the degree of haemorrhage. Early involvement of senior support is essential. Uterine wall repair can be attempted if deemed appropriate. Sustained massive haemorrhage is likely to require hysterectomy.

Conclusion

Posterior wall rupture is a rare, life-threatening emergency. A high level of clinical suspicion, intra-operative vigilance and immediate treatment are vital for maternal and fetal survival. Our case is one of the few reported in world literature which highlights this.