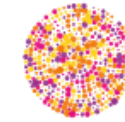


# Two Uterine Scars and a Vaginal Birth

Christine Wu<sup>1</sup>, James Christie<sup>2</sup>, Roshini Nayyar<sup>1</sup><sup>1</sup> Institute for Maternal Fetal Medicine, Department of Obstetrics and Gynaecology, Westmead Hospital, Westmead, Australia<sup>2</sup> PRP Diagnostic Imaging, Sydney, Australia

## ABSTRACT

Uterine scarring increases the risk of uterine rupture in labour, which can result in significant maternal and fetal morbidity and mortality. There is insufficient evidence for a recommendation on the safety of vaginal delivery in the context of a patient with scars from both uterine perforation and a previous lower uterine segment caesarean section (LUSCS).

We present the case of a pregnant woman with two unique uterine scars – in addition to one previous caesarean section, she had a history of uterine perforation from a uterine manipulator following a gynaecological procedure. MRI confirmed ultrasound findings of uterine thinning at the site of previous perforation. She went into spontaneous labour and progressed to have a normal vaginal delivery.

In her first pregnancy the woman had an emergency LUSCS at 41 weeks gestation for failure to progress with delivery of a health baby, with a 2-layer closure of the uterus at that time. Three years later she had an elective laparoscopic cystectomy complicated by uterine perforation with ClearView™ uterine manipulator that was managed conservatively (figure 1).

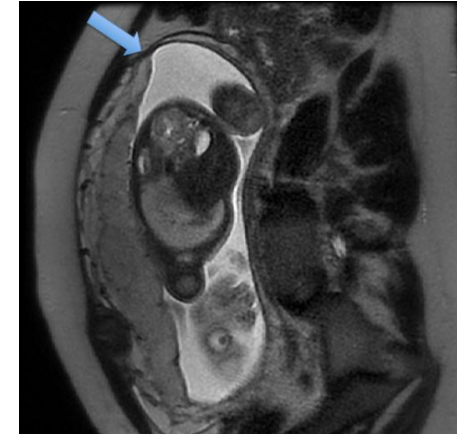


**Figure 1:** uterine perforation at the fundus with ClearView uterine manipulator

## CASE PRESENTATION

She conceived a year after the perforation. In this pregnancy her BMI was 24, antenatal screening blood tests and ultrasound scans were unremarkable. At 25 weeks she was admitted to hospital with abdominal pain and threatened preterm labour. Tertiary ultrasound scan reported thinning of the uterine fundal wall in the region of previous perforation that was stable at 3-4mm in thickness on serial measurements. Outpatient MRI confirmed these findings (figure 2).

The woman was counselled, and offered an elective repeat caesarean, however this was declined. In keeping with her wishes a plan was made to wait for the spontaneous onset of labour without induction or augmentation with oxytocin. After a stretch and sweep of the cervix, she presented to birth unit at 40 weeks and 5 days gestation in spontaneous labour with ruptured membranes. She had two large bore peripheral cannulas inserted, and her labour was monitored with continuous cardiotocography.



**Figure 2:** MRI abdomen of gravid uterus showing fundal thinning in the region of previous perforation (arrow).

After 13 hours of labour she had a successful normal vaginal delivery of a live male infant that weighed 3380g. APGAR scores were 9 at 1 and 5 minutes. Her postpartum course was uncomplicated, and she was discharged the next day with contraception.

## DISCUSSION

Current guidelines support the safety of vaginal delivery after one caesarean birth<sup>1</sup>, provided the woman is adequately counselled on the risks of uterine rupture which occurs in 5-7 per 1000 VBAC attempts.<sup>1</sup> There is currently little information in the literature regarding the incidence of scarring from both prior caesarean and uterine perforation, or the risk of rupture in this group of women.

While our patient had an excellent outcome, there are numerous case reports in the literature of uterine rupture following iatrogenic perforation of the uterus<sup>2</sup>. We must be ever vigilant on the potential risk of uterine rupture with close monitoring of the woman's symptoms in labour.

Unfortunately, no method of uterine scar monitoring has demonstrated success in predicting the risk of uterine rupture.<sup>3</sup>

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