

Uterine Rupture Secondary to Degenerating Fibroids in Pregnancy: Case Report

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INTRODUCTION

Uterine leiomyomas (fibroids) are benign tumours affecting almost 80% of women by the age of 50.

Complications in pregnancy include:

- Miscarriage
- Preterm labour
- Placental abruption
- Abnormal placentation
- Malpresentation
- Intrauterine growth restriction
- Post-partum haemorrhage.

The following case report depicts the rare occurrence of uterine rupture secondary to degenerating fibroid in pregnancy.

CASE REPORT

Obstetric History

32 year-old nulliparous female with 2 previous spontaneous miscarriages in 2017-2018 for which she was commenced on Enoxaparin 40mg and Aspirin 100mg by fertility specialists. This is a spontaneously conceived pregnancy. She is otherwise medically and psychosocially well with nil prior history of surgery.

This patient's fibroids were monitored at nuchal, morphology with a plan for 3rd trimester ultrasounds to monitor foetal growth. In the second trimester, clexane was ceased while aspirin was continued until 36/40.

Morphology ultrasound: stable, NAD

- Right 31x24x29mm, mid 48x41x54mm
- Placenta posterior, low lying (touches internal os).

Antenatal Progress

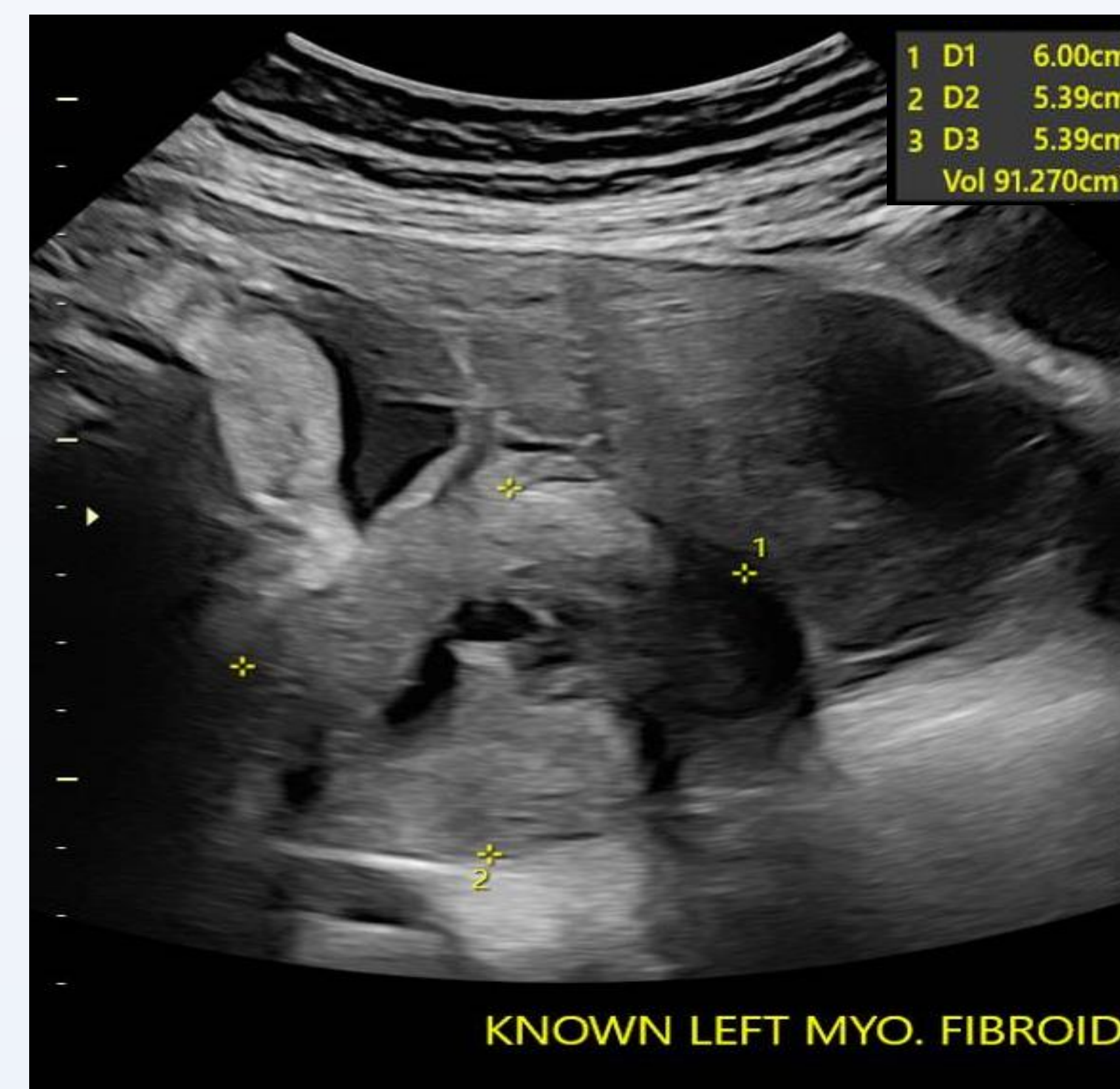
Admission 21+6 – 22+1 / 40

- Severe left sided abdominal pain associated with urge to open bowels
- Normal inflammatory markers and foetal growth, discharged once pain improved

Admission 22+4 – 22+5 / 40

- Planned for inpatient MRI, but discharged as patient recovered with analgesia

Patient was diagnosed with gestational diabetes on insulin with serial growth ultrasounds indicating a large for gestational dates foetus with unstable lie. Mid - Left myometrial fibroid stable at 6cm, with posterior placenta clear from cervix.



Delivery

Underwent a successful external cephalic version at 36+6 for transverse lie and was induced at 37+4 for GDM, LGA and unstable lie.

Prostaglandin (Cervidil) was inserted for 24 hours due to unfavourable cervix and high presenting part. Patient complained of back and pelvic pain with some bright loss following vaginal examinations. This was thought to be within normal limits due to normal foetal and maternal monitoring.

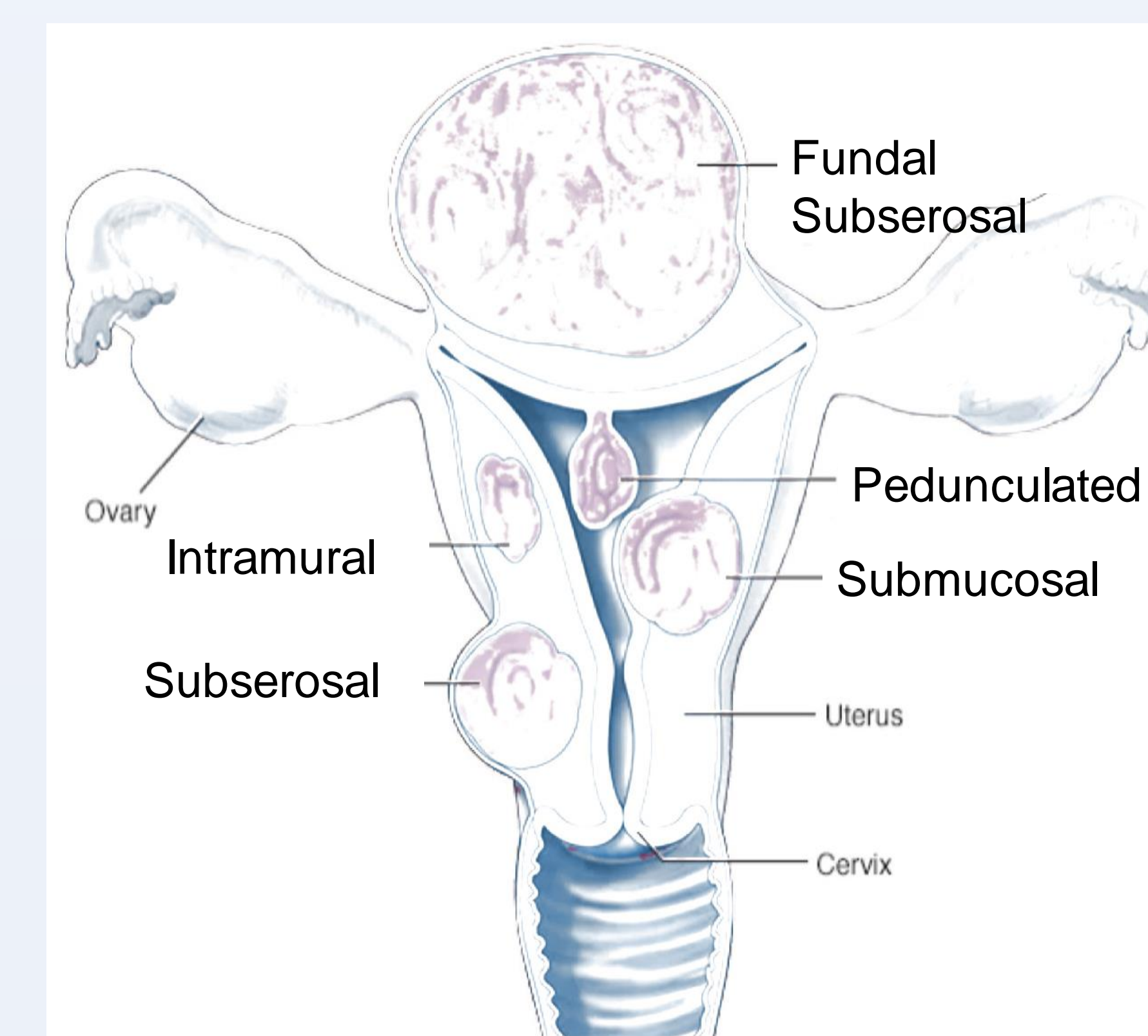
Emergency caesarean performed due to cord prolapse at time of artificial rupture of membranes. Blood stained peritoneal fluid noted on entry with a 3cm defect containing a 6cm cavity with necrotic material in situ. Appearance of a large degenerating uterine fibroid with subsequent rupture. Cavity was incised, explored, washed out and sutured. 1100ml post partum haemorrhage with 300mls autologous blood returned. Drain was inserted and removed within 24hrs as output was minimal.

Postnatal Recovery

Patient and neonate recovered well postnatally. Debriefed and advised 2 year pregnancy interval with recommendation for elective caesarean at 37/40 for future pregnancy.

DISCUSSION

Uterine rupture is rarely caused by fibroids without prior surgery involving uterine instrumentation and scarring. However, we hypothesised in this case that the contractions caused by the prostaglandin induction superimposed with the degenerating fibroid led to the uterine rupture. The relationship of fibroids to the uterine surface, resulting symptoms and foetal position aids in the recommendation of management and mode of delivery.



Postpartum myomectomy can be recommended for patients with prior adverse outcomes in pregnancy. In some cases, myomectomies have been performed in early pregnancy to prevent growth restriction, miscarriage and reduce pain, however there is a high risk of bleeding, uterine perforation and foetal death. Myomectomy at time of delivery is rarely recommended due high maternal morbidity.

CONCLUSION

Uterine rupture in labour requires emergency caesarean section due to the risk of maternal and foetal compromise. Unfortunately, management of fibroids in pregnancy is not well documented in literature with this case of spontaneous uterine rupture secondary to degenerating fibroid being a rare occurrence. It is important to identify fibroid location, size, foetal growth, mode of delivery and prepare for post partum haemorrhage to ensure safe delivery.

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