

Background

Uterine fibroids whilst common in women of reproductive age, represent a rare cause of abdominal pain during pregnancy. Equivocal evidence exists regarding impacts of fibroids on obstetric outcomes with most common associations being spontaneous miscarriage, preterm labour, placental abruption, malpresentation and postpartum haemorrhage. Whilst most women with fibroids have uneventful pregnancies, degenerating fibroids in pregnancy are a potential complication causing significant pain burden and morbidity antenatally.^{1,2}

This case describes a rare case of uterine fibroid rupture in pregnancy.



Figure 1.
Ultrasound
Pelvis –
fundal fibroid
in pregnancy

Case Study

A 31 year-old primigravida presented at 20-weeks-gestation with severe abdominal pain in the setting of a known fibroid uterus. The patient had initially been treated by her GP for a lower urinary tract infection and represented to the Maternity Assessment Centre of a Tertiary Centre with recurrence of severe pain associated vomiting and anorexia. Inflammatory markers were raised with a white cell count (WCC) of $27.9 \times 10^9/L$ and C-reactive protein of 220.

The General Surgical Unit was consulted due to persistent pain and peritonism and the decision was made to proceed to theatre for clinical appendicitis for a diagnostic laparoscopy and appendicectomy.

Results

Intra-operative findings revealed a normal appearing appendix and bowels however, an unusual clinical picture of a centrally degenerating uterine fibroid with necrosis and small punctum identified with freely expressing pus. Given its wide base at the fundus, decision was to pursue expectant management with 3 drains inserted, left draining for 4 days prior to removal and a prolonged course of antibiotics for four weeks in consult with the infectious disease team for treatment of a complex abdominal infection.

The patient recovered well and proceeded to a deliver via elective caesarean section for a major placenta praevia at term.

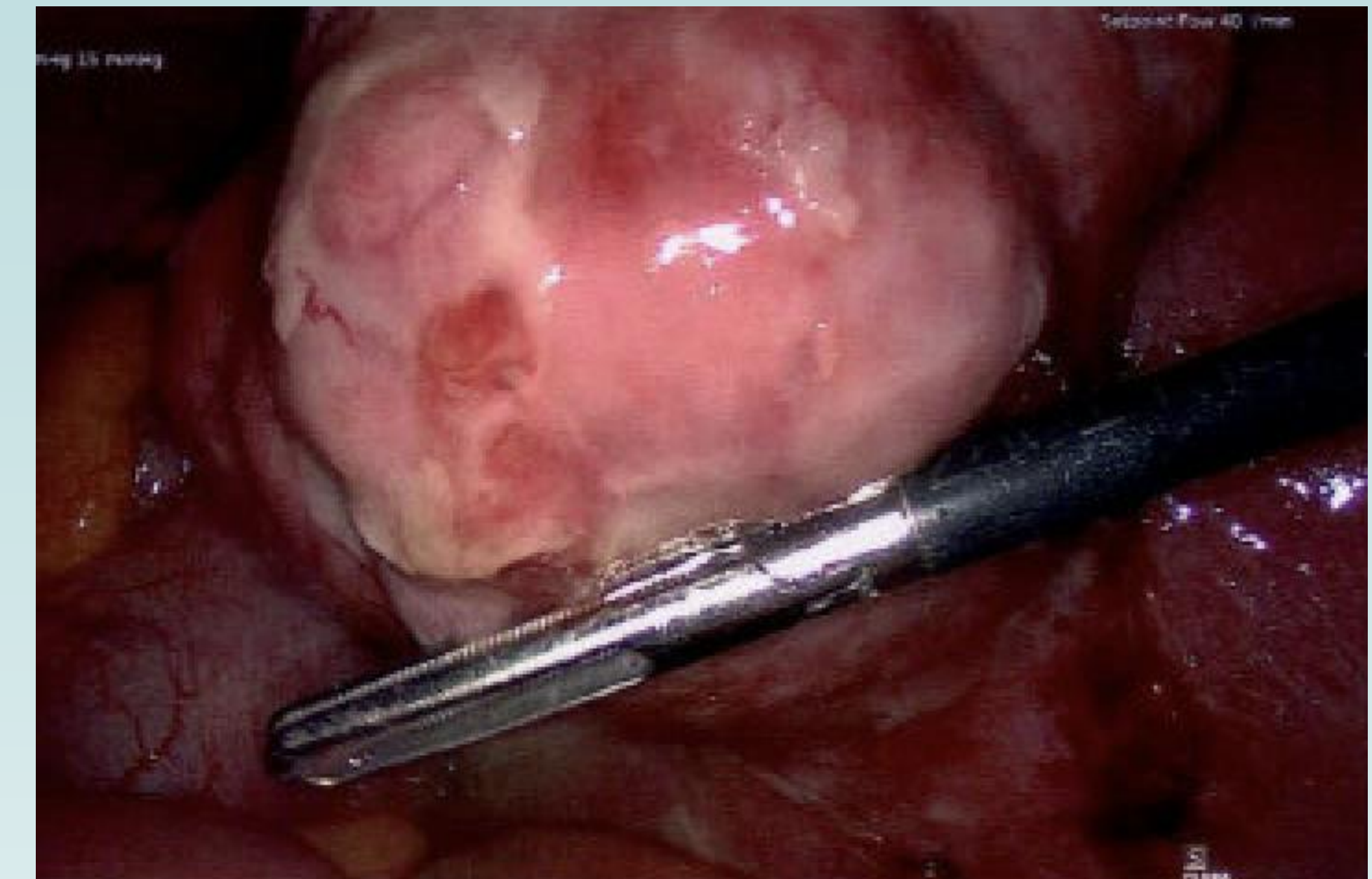


Figure 2. Intra-operative images of fundal fibroid in pregnancy with ruptured punctum and purulent discharge

Conclusion

It is worth considering this rare differential which can resemble more common presentations such as appendicitis in women who present with acute abdominal pain antenatally.

In rare cases of rupture and fluid leakage from degenerating leiomyomas, prompt diagnosis and surgical management can prevent severe morbidity such as peritonitis, maternal sepsis and adverse neonatal outcomes.

References

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2. Contemporary management of fibroids in pregnancy. Lee HJ, Norwitz ER, Shaw J. Rev Obstet Gynecol. 2010;3:20–27.
3. Acute appendicitis in pregnancy mimicking leiomyoma pain. Kim Y, Hwang I. BMJ Case Rep. 2021;14 doi: 10.1136/bcr-2020-238476.