



Introduction

Antepartum haemorrhage (APH) occurs in 3-5% of pregnancies. Most commonly this is due to provoked bleeding from cervical ectropion, placenta praevia or placenta abruption. We present the case of a non-labouring patient in the third trimester of pregnancy who required emergency Caesarean section delivery for APH secondary to spontaneous atraumatic ovarian ligament haemorrhage.

Patient Presentation

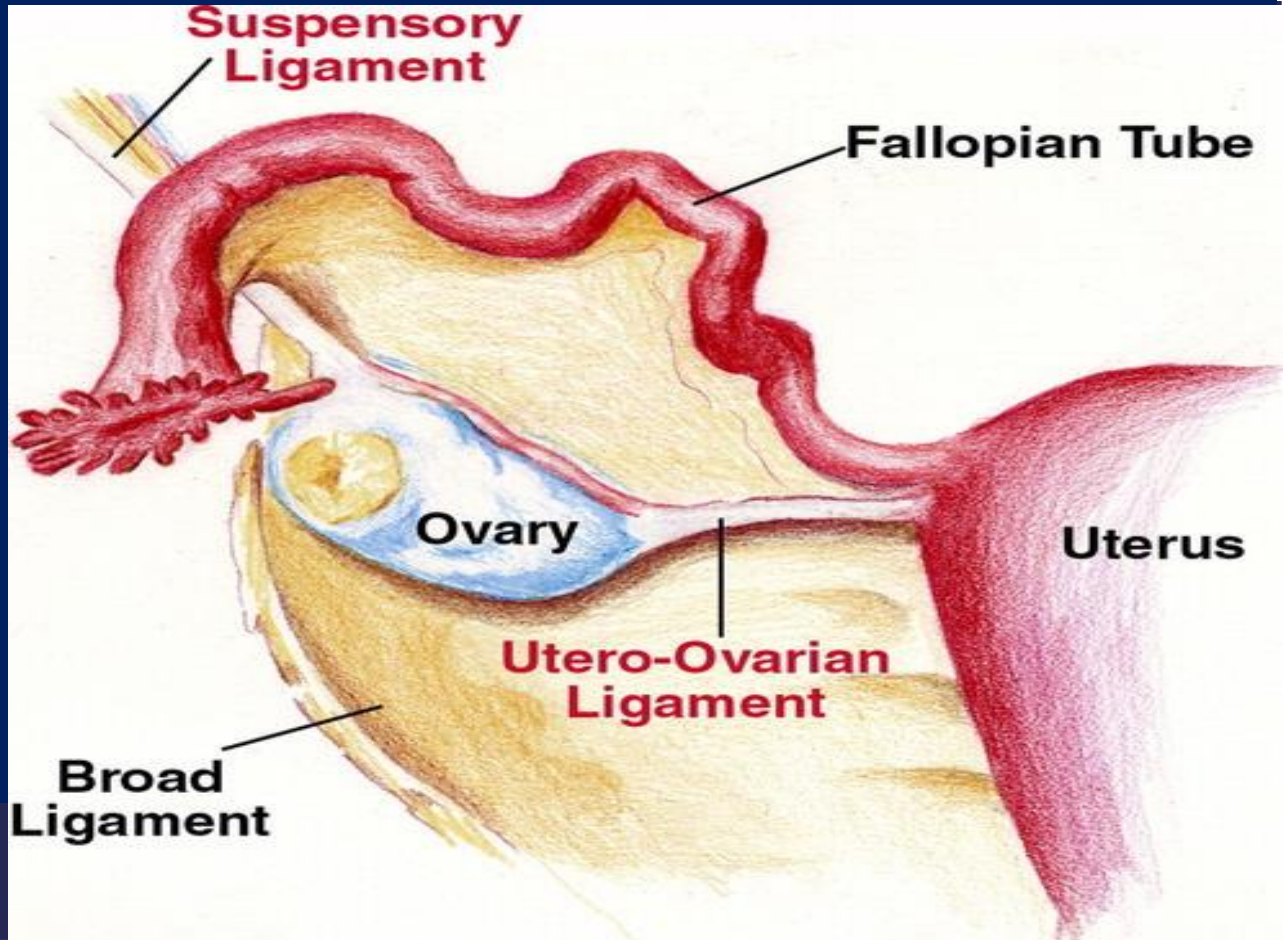
A 31-year-old lady presented at 29+4 gestation with acute onset of abdominal pain, right shoulder tip pain , light headedness and syncope, with no evidence of Labour .

Background :

Age : 31 years
Booking weight : 68 kg
P1+1
uncomplicated spontaneous vaginal delivery of a live born 2 years previously and a surgical termination of pregnancy at the age of 19.
No medical or surgical history
Non-smoker
No regular medications.

Spontaneous antepartum ovarian ligament haemorrhage

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Findings

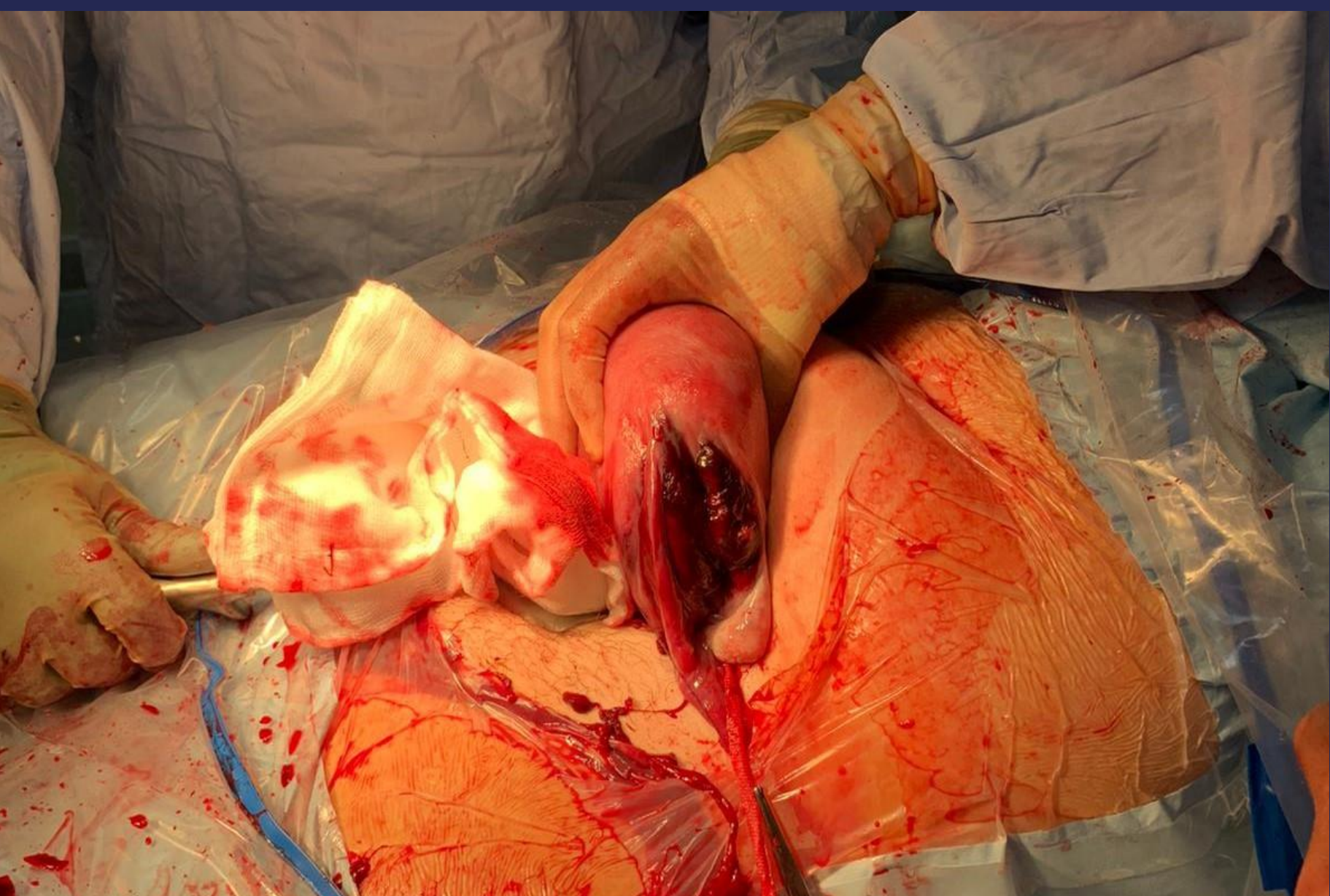
Maternal Assessment :
tachypnea
normotention
relative Bradycardia 60bpm
worsening abdominal pain

Fetal Assessment :
Frequent unprovoked decelerations on continuous cardiotocography

Decision for a category 2 Caesarean section under general anaesthesia where a live female infant was born two minutes after the start of Procedure .

During the procedure :
There was extensive clot formation in the abdominopelvic cavity with active bleeding from the left ovarian ligament, which required suturing to achieve haemostasis. Estimated blood loss was 3.5 litres.
Volume resuscitation included 3 units of packed red blood cells (867 ml), cell-salvaged blood (324 ml) and 4 units FFP (1037 ml) administered through an intravenous fluid warmer. Crystalloid administration totalled 1300 ml.
Uterotonic agents given included 10 intravenous units of oxytocin administered in split boluses, 500 micrograms of intramuscular ergometrine, 250 micrograms of intramuscular carboprost, 800 micrograms of misoprostol per rectum and an oxytocin infusion (40 units.h-1 for four hours).

Post Procedure :
The patient was transferred to a high-dependency setting overnight and was suitable for step down to care on labour ward 12 hours later. There was no evidence of further significant bleeding and hospital discharge occurred 2 days after delivery.



Discussion

This case highlights important areas for consideration when managing an unstable patient presenting antenatally.

Firstly, this sparsely reported pathology is rare, especially in the absence of labour. It is a potentially fatal cause of haemorrhage and should be considered in the differential of any unstable non-labouring antenatal patient. Early surgical intervention led to early control of haemorrhage and clinical stability with good maternal outcome.

Secondly, shoulder tip pain in the context of maternal compromise should serve as a red flag. Any process whereby there is free air or fluid, including blood in the intra-abdominal cavity can lead to pain.

Lastly, the cardiovascular sequelae of the pathology are of importance. The relative bradycardia was unusual and could be due to involvement of the ovarian ligament and subsequent haemoperitoneum leading to stimulation of parasympathetic afferents. An additional explanation could be the Bezold-Jarisch reflex whereby a noxious stimulus (reduced left ventricular filling) leads to a protective bradycardia.

Conclusion

This case highlights a rare cause for this presentation of APH. In the non-labouring pregnant patient, concealed antenatal haemorrhage may be identified late and can have deleterious maternal and foetal consequences. Postural hypotension, pre-syncopal symptoms and shoulder tip pain should prompt urgent assessment. A high index of suspicion is required, followed by early resuscitative and surgical management.