

Spontaneous uterine artery rupture thirteen days post-caesarean section

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Background

Uterine rupture is a rare obstetric emergency, typically occurring during delivery in women with known risk factors, such as previous caesarean section. Spontaneous uterine rupture is exceedingly rare with high foetal and maternal mortality. We present a case of delayed concealed haemorrhage secondary to uterine rupture two weeks after delivery. This has never been reported before.

Case Discussion

The case background and timeline of presentation are illustrated in figure 1. Several potential aetiologies could account for the clinical presentation observed in this case report. More common explanations include caesarean scar dehiscence or the presence of a uterine artery pseudoaneurysm; however, neither was identified upon return to theatre. One hypothesis is that uterine artery rupture occurred at the time of delivery, initially tamponaded by a large haematoma which subsequently dislodged, leading to secondary haemorrhage and haemodynamic instability. This is less plausible given the high pressure and flow dynamics within the uterine arteries, which would likely preclude sustained tamponade over such an extended period. The most probable explanation is a spontaneous rupture of the uterine artery occurring in the late postpartum period, in the absence of preceding trauma or identifiable predisposing factors.

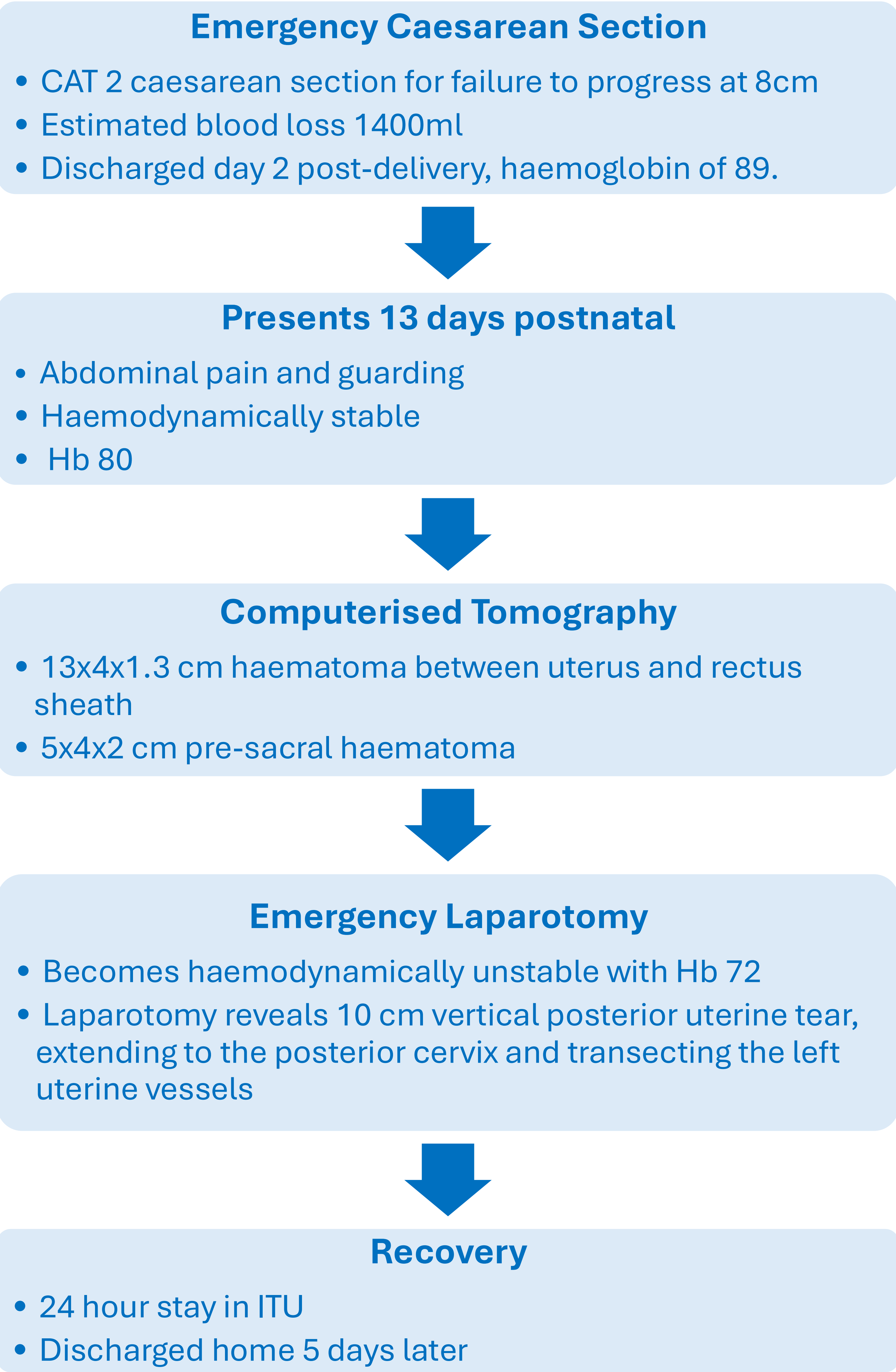
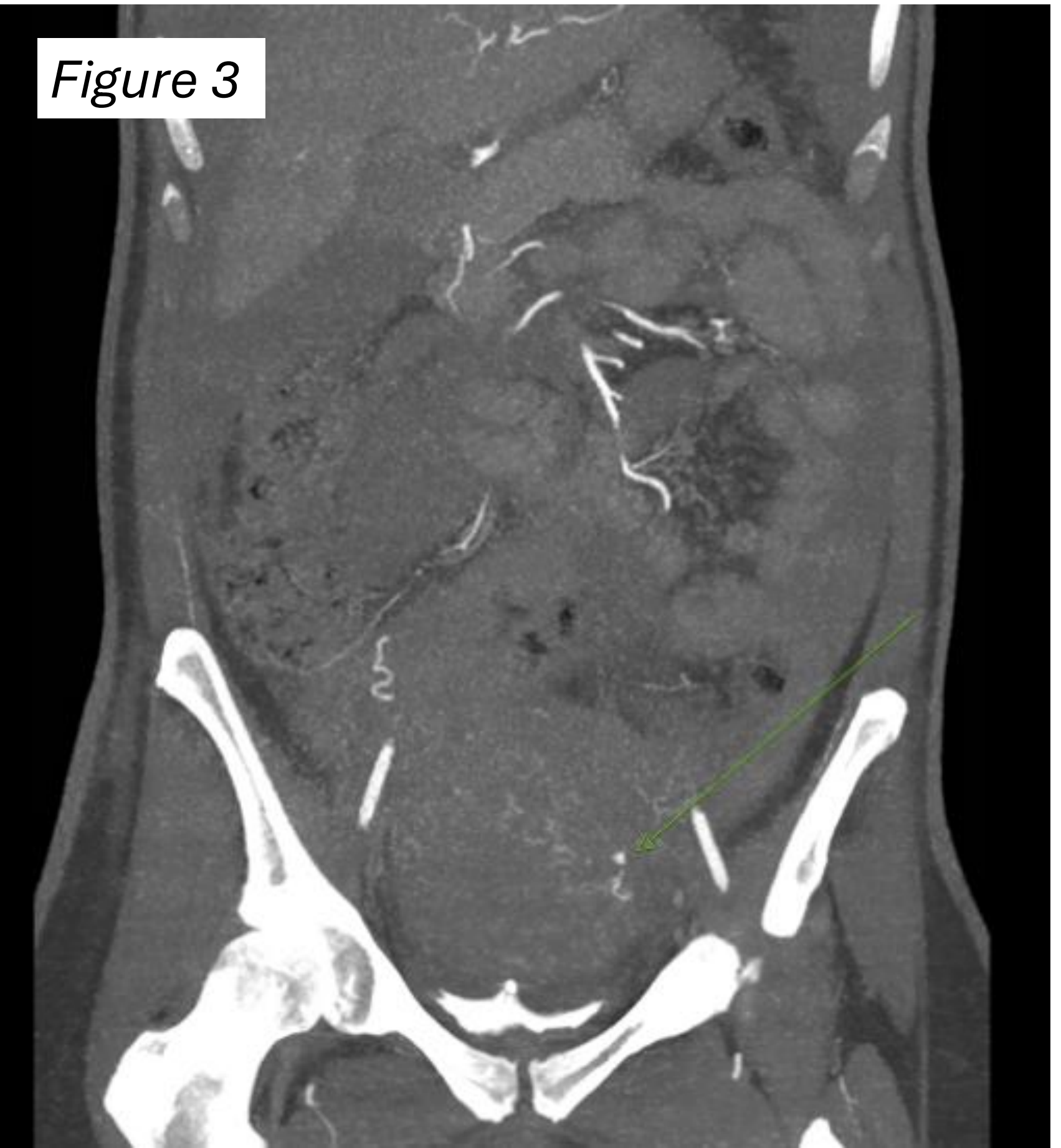
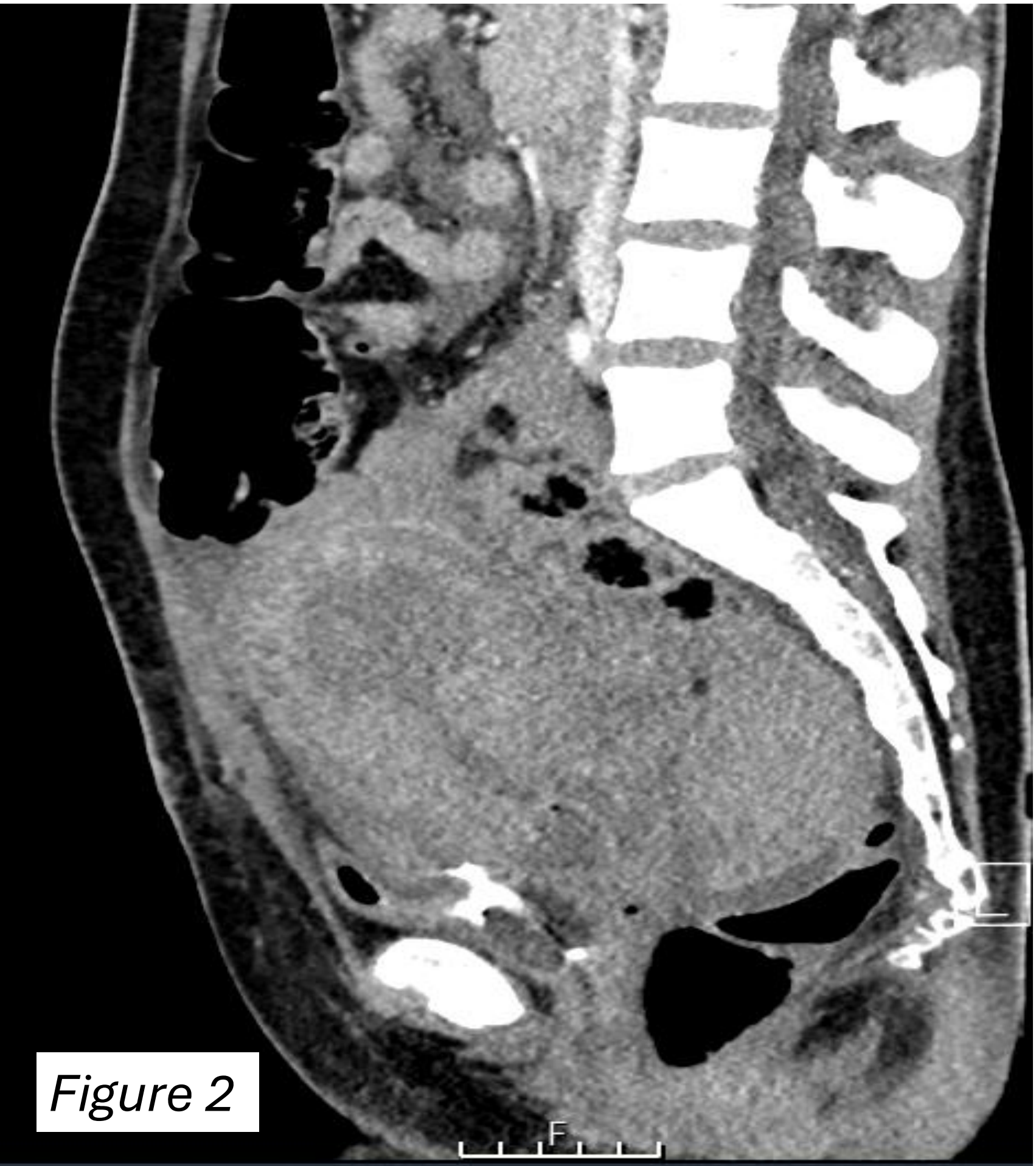


Figure 1 – timeline of events



Sagittal (figure 2) and coronal (figure 3) CT images demonstrating a large subfascial haematoma in the retro-uterine space, and a large pre-sacral haematoma between the uterus and rectum

Literature Review

Uterine artery rupture in the postpartum period is extremely rare, with very few cases recorded in the literature¹⁻⁴. This report describes the first documented case of uterine artery rupture occurring almost two weeks postpartum. Other documented cases typically presented in the immediate postpartum and often resulted in poor outcomes, including maternal death. In contrast to previous cases – involving risk factors such as neurofibromatosis or abnormal placentation – this case highlights the potential for delayed presentation in the absence of known risk factors.

Take home messages

In women presenting with abdominal pain and haemodynamic instability following caesarean section, causes beyond abdominal collections and scar dehiscence should be considered. Early recognition of uterine rupture coupled with timely multidisciplinary intervention can significantly improve maternal outcomes and maximise the potential for fertility preservation.

References

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