

Fibroid migration - an unusual presentation of postnatal sepsis (case report)

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Introduction

- Fibroid migration with spontaneous expulsion has been reported post-partum but is usually a complication of uterine artery embolisation.
- We present an unusual case of postpartum sepsis, cause by fibroid migration.

Case Presentation

Background

- 28 year old woman, 5 weeks post natal
 - emergency caesarean at term for presumed fetal distress at 7cm dilatation*
- Known 17cm posterior subserosal fibroid (Figure 1)

Symptoms

- intermittent lower abdominal pain, exacerbated by breast feeding
- Increased PV purulent discharge and bleeding
- Intermittent protrusion of "lump in vagina"

Signs

- Pulse 120bpm, BP 89/53, Temperature 39°C
- WCC 8.6, CRP 253

Investigation and Treatment

- Exam: Palpable uterus at umbilicus and tenderness over the fibroid. Minimal PV blood loss and no abnormality seen on internal and speculum assessment.
- USS: heterogenous endometrial echo complex with no vascularity
- IV antibiotics therapy for 3 days with no improvement.
- CT: distended uterus with 17cm low density material with multiple gas locules within the cavity. (Figure 2)
- Hysteroscopy: A mass seen in vagina which appears to originate from within the uterine cavity and protrude through the dilated os. Tissue removed in fragments with gentle traction and twisting with Rampley's forceps, followed by drainage of haemopurulent discharge. A "punched out" fossa is visualised on the right posterior uterine wall and an otherwise normal uterine cavity (Figure 3)
- Histology: multiple fragments of leiomyoma with areas of ischaemic necrosis.
- Rapid resolution of pain and sepsis.
- Follow up MRI: residual rim of enucleated posterior fibroid, lying immediately adjacent to the endometrial cavity and the fluid centre communicating with the endometrial cavity (Figure 4)

Evidence of fibroid migration

Figure 1. Transabdominal ultrasound at 35 weeks gestation.

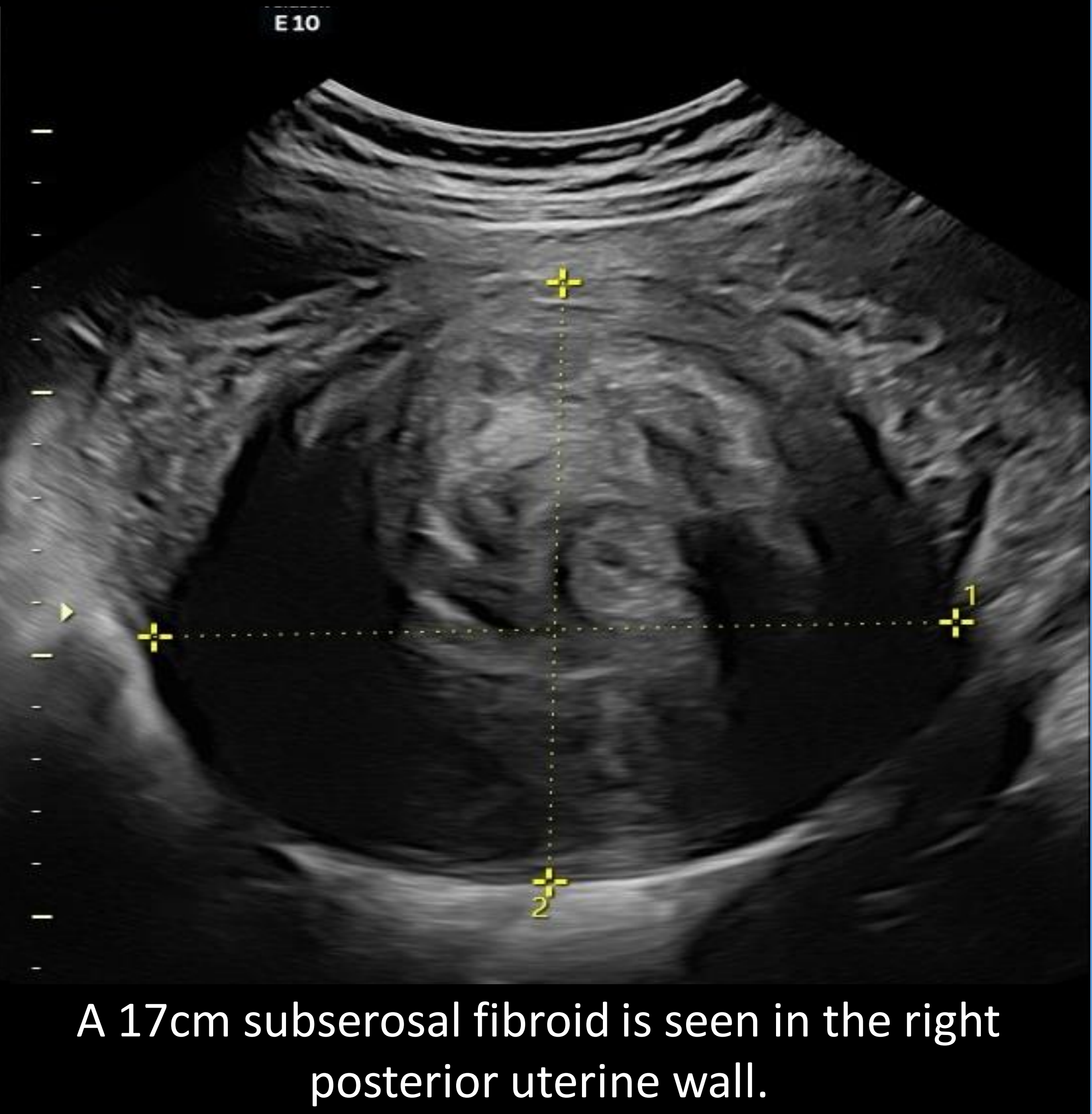


Figure 2. CT abdomen/pelvis at presentation with sepsis - 5 weeks postnatal.

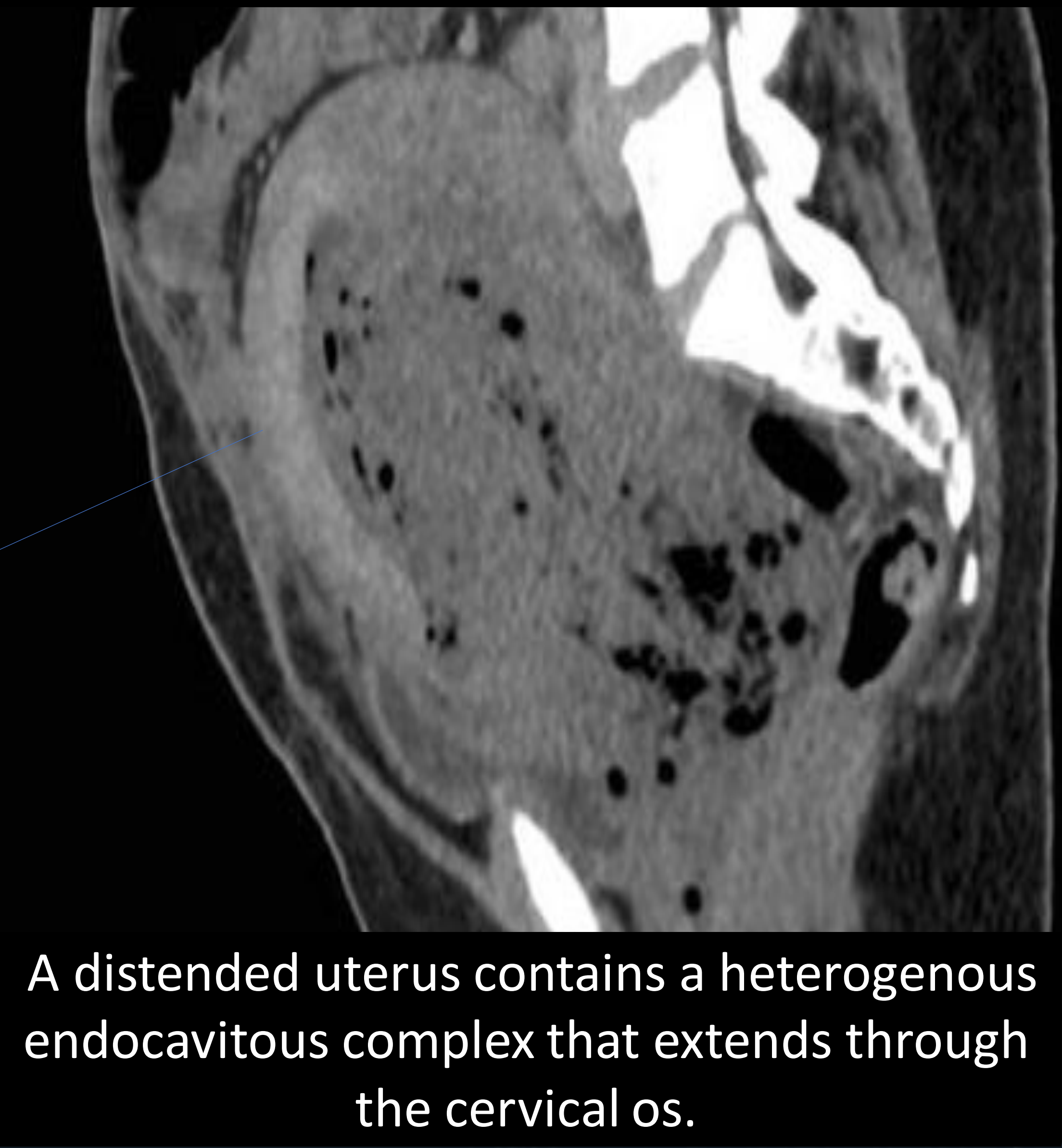


Figure 3: Hysteroscopy after tissue removed



Figure 4: MRI pelvis at 3 month follow up.



Discussion

Puerperal fibroid migration is a rare phenomenon. In the literature, only a few cases have been reported. The exact mechanism of migration is unknown but is proposed to occur during uterine involution. During pregnancy, the myometrium undergoes significant remodelling. This pregnancy-induced physiological change may predispose the myometrium to mechanical breakage, allowing fibroid expulsion through the myometrial layers from the force of uterine contractions during puerperal involution. Subsequently, these fibroids will be prone to necrosis due to the restriction of blood supply following the migration process. These processes may occur slowly over weeks, or in this case, over 1-2 months, therefore, corresponding clinical symptoms and signs can evolve insidiously, making assessment and prompt diagnosis difficult.

Learning Points

- Pyomyoma secondary to puerperal fibroid migration is a rare cause of postnatal sepsis. A high clinical suspicion must be held in women with known antenatal fibroids to ensure early diagnosis and prompt treatment.
- In postnatal women with a history of fibroids, who present with sepsis without any obvious source, fibroid migration should be considered. In such a scenario, regular patient reviews are imperative to ensure evolving and potentially life-threatening clinical signs are not missed.