

A Case of Uterine Inversion due to Prolapsed Fibroid

Dr Fatema Shaikh, Mr Dhiraj Uchil
University Hospital Lewisham, London, United Kingdom

Objective: Chronic uterine inversion of the non-puerperal uterus is an uncommon event. This is a case report of a woman, with menorrhagia, abdominal and back pain, who was found to have a prolapsed infected fibroid. A uterine inversion was identified intraoperatively.

Case Report

A 41-year-old woman presented with history of heavy menstrual bleeding, lower abdominal pain and back pain. She had two children delivered normally and no other significant gynaecological history. Her pelvic examination revealed a bulky fibroid uterus. Her ultrasound scan and MRI pelvis suggested endometrial cavity was grossly distorted due to presence of a large submucosal fibroid measured 7.9 x 8.6 x 8 cm.

She presented to A&E two months later with abdominal pain radiating to her back, nausea and sensation of a new lump in the vagina. There was a large necrotic fibroid in the vagina with offensive discharge. Broad spectrum antibiotics were commenced, and she had emergency resection of fibroid. The histology feature was consistent with leiomyoma.

She was readmitted three weeks later with worsening abdominal and back pain, vomiting, fever and inability to pass urine. An MRI pelvis scan showed (Figure 1) a fibroid prolapsing through the cervix into the vagina, almost extending to the introitus. The bladder was markedly distended suggesting urinary retention, likely due to pressure effect on the urethra.

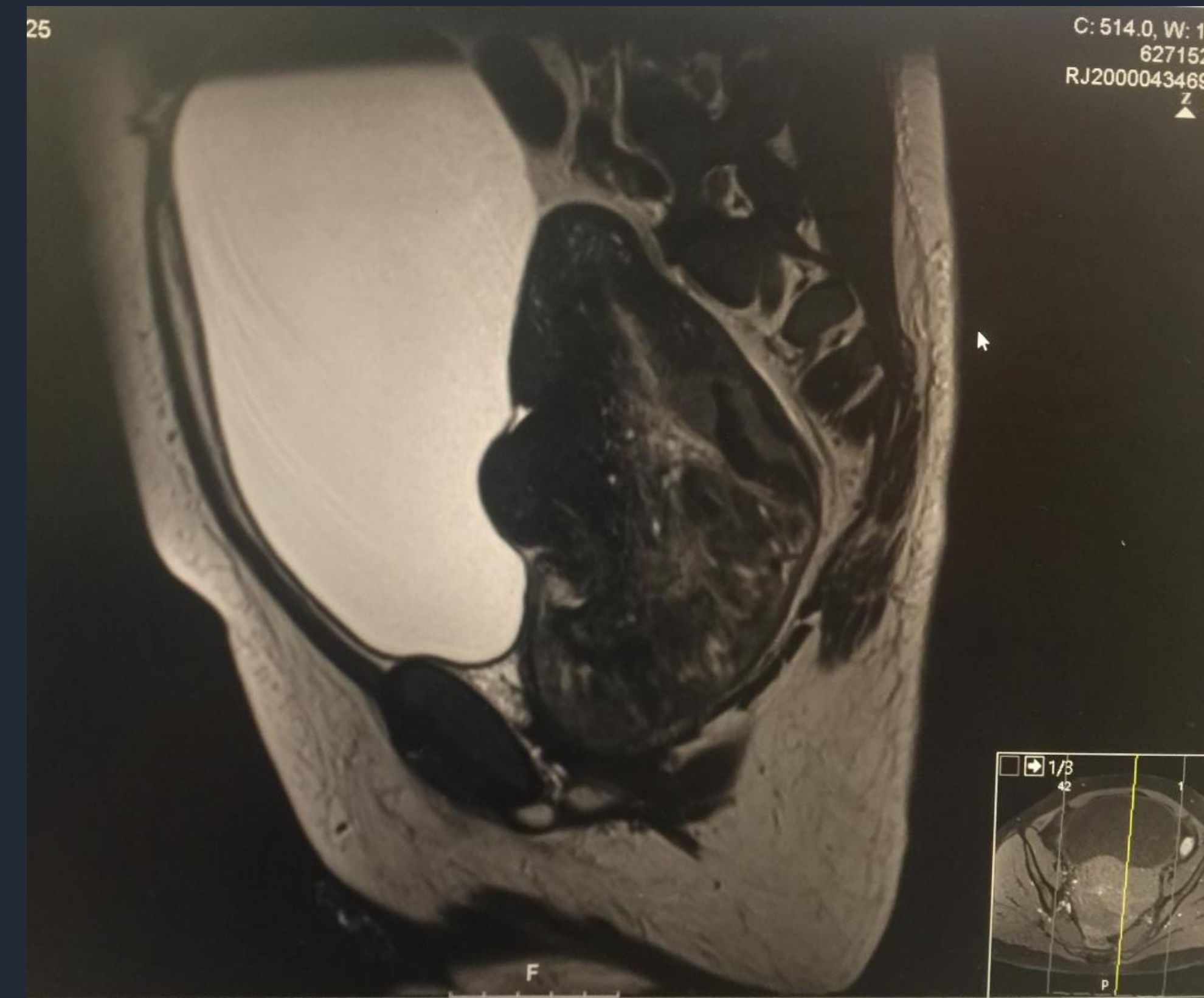


Figure 1: MRI scan showed the partially resected fibroid prolapsed through cervix into the vagina, almost extending to the introitus. The bladder was markedly distended suggesting urinary retention.

She was scheduled for a hysterectomy. Under anaesthesia, the uterus was found to be 18-20 weeks size with a large fibroid in the vagina. The abdomen was opened by a Maylard's incision, ligating both inferior epigastric vessels. This revealed a uterine inversion with the left tube and ovary drawn into fundus of uterus (Figure 2). The pedicle of the prolapsed fibroid was near the left cornu. Both ovaries looked normal.

In view of the distorted anatomy, the surgical technique was modified. A longitudinal transfundal incision was made near the left cornu. The uterine cavity was opened and the fibroid pedicle was divided from inside the cavity restoring normal uterine anatomy. As it was not possible to identify the lower limit of the cervix due to effacement secondary to the fibroid, it was decided to perform a subtotal hysterectomy. The detached fibroid was extracted abdominally (Figure 3). The estimated blood loss at surgery was 600ml.

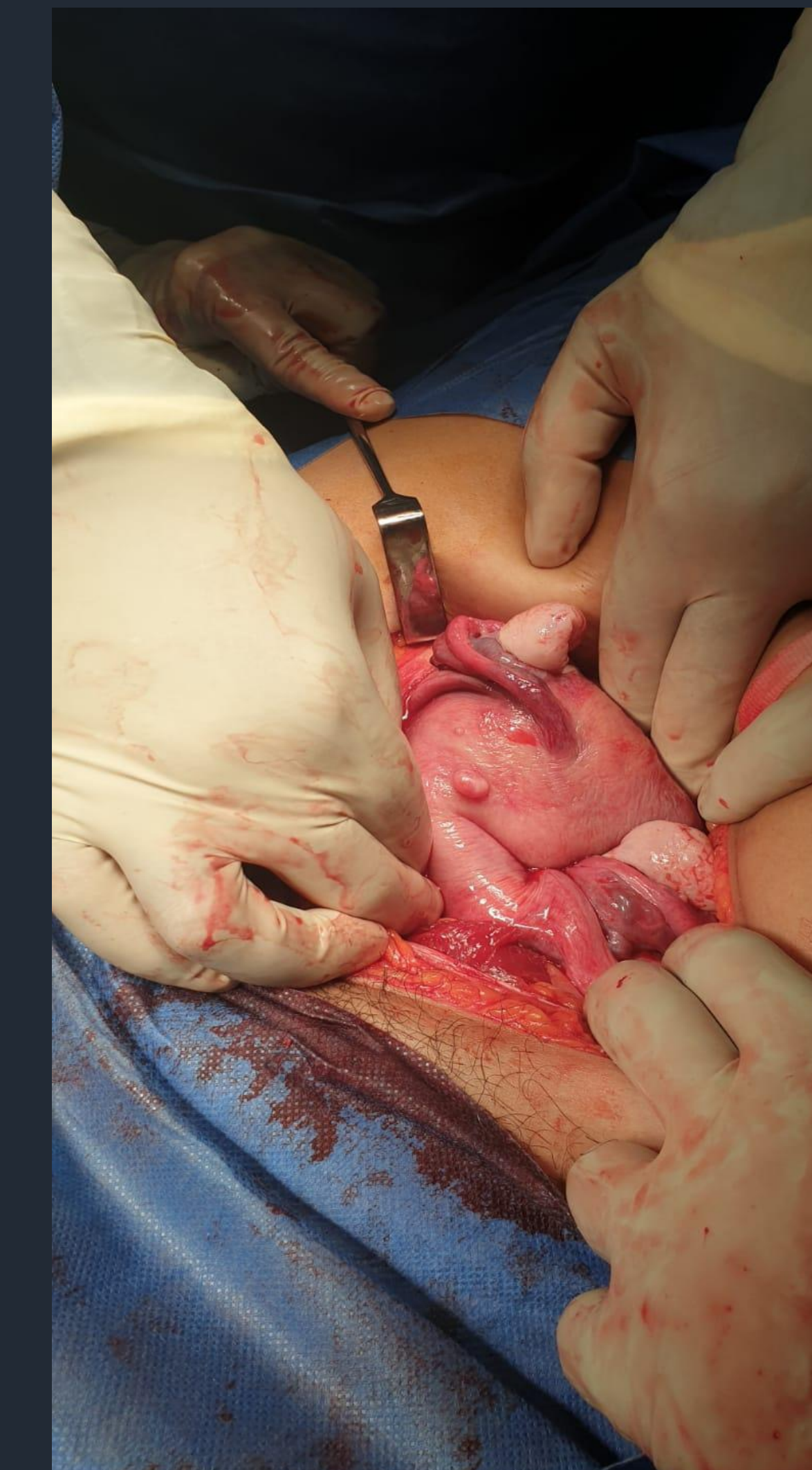


Figure 2: This operative view during a laparotomy shows the uterine inversion with the left tube and ovary drawn into fundus of the uterus

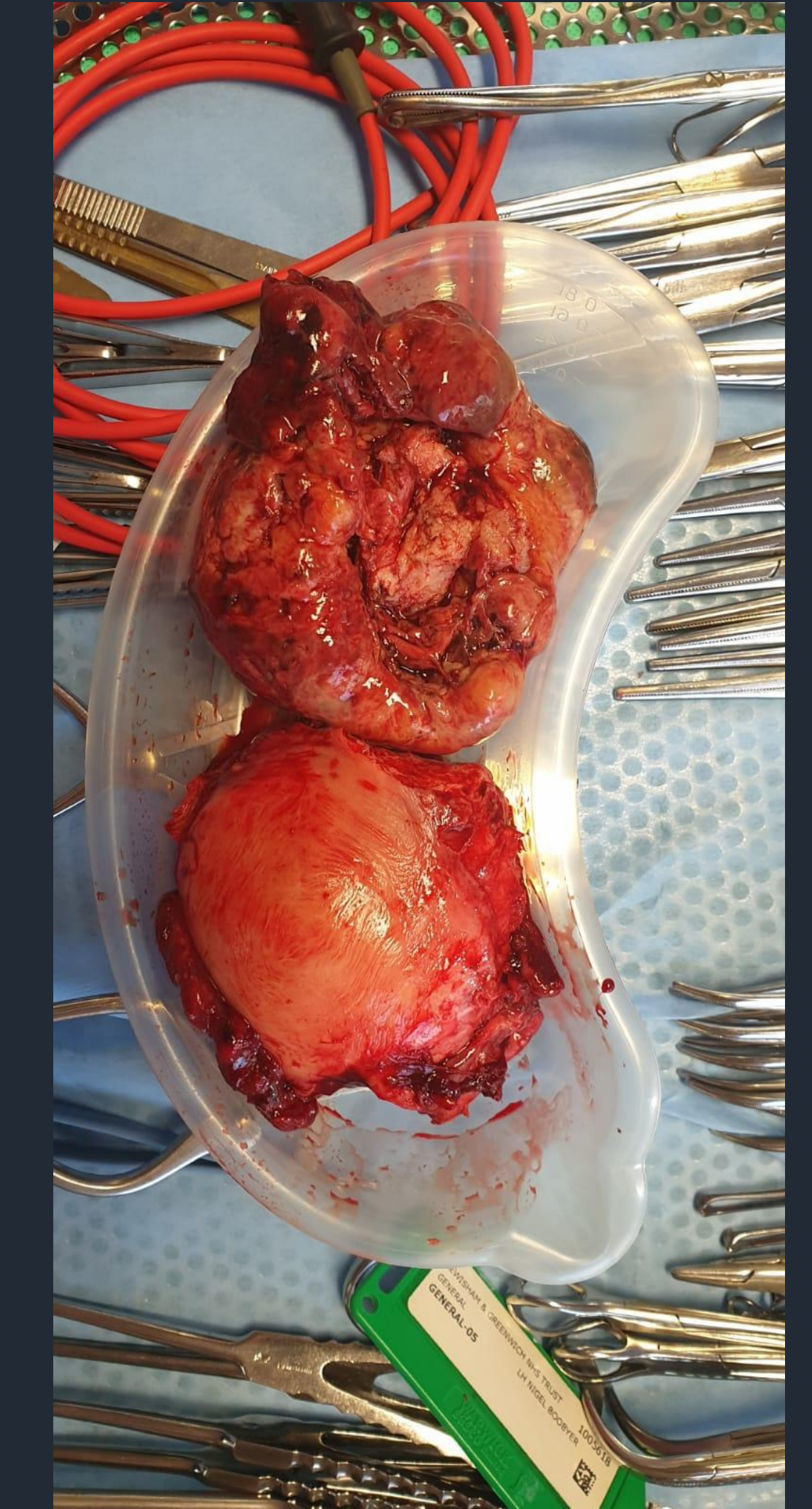


Figure 3: Uterus both fallopian tubes and large necrotic fundal fibroid after resection.

Discussion:

Uterine inversion occurs when the uterine fundus collapses into the endometrial cavity, turning the uterus inside out either partially or completely. While inversion is sometimes noted following an attempted delivery of the placenta after childbirth, inversion of uterus in non-puerperal state is unusual. The most common cause is leiomyoma, followed by sarcoma. In our case, the uterine inversion occurred due to a prolapsed submucosal fundal fibroid. The definitive diagnosis of incomplete inversion was only made at the time of hysterectomy. A further unusual feature of this case is the rapid recurrence of a prolapsed fibroid, despite an operation that initially removed a large prolapsed fibroid. It is not clear as to why this occurred. It is possible that only a portion of the fibroid was removed at the initial surgery and hysteroscopy failed to identify a large residual fibroid, due to lack of uterine distension caused by the dilated cervix. A second possibility is the development of a new submucous fibroid following the removal of the first. However, there was no evidence in previous imaging of multiple fibroids, suggesting that a residual fibroid is the more likely possibility. Our case demonstrates the importance of being aware of rare complications like uterine inversion when the patient has symptoms out of proportion to clinical findings. This case highlights the difficulties in diagnosis, despite imaging and the need to modify surgical techniques intraoperatively to deal with an unusual complication. The need for the preservation of fertility and excluding malignancy is important in selected cases.

Conclusion:

This was an unusual presentation of a common condition like fibroids. It is important to be aware of rare complications like uterine inversion with prolapsed fibroid. Due to different presentations of the condition and its rarity, it can be misdiagnosed on initial assessment. Resuscitation would be the priority, when necessary, as some patients may be septic or in haemorrhagic shock. Correction of anaemia, pain relief, and starting antibiotics, relieve distress from urinary retention are all vital, as shown in this case. The type and approach of surgery should be individualized considering the age, desire for future fertility, aetiology, and the stage of the disease in case of malignancy. It is important to be prepared to deal with intra-operative challenges and modification of surgical technique where necessary.

