

Uterine tube evisceration during drainage tube removal – A rare case report

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Case report

Uterine tube evisceration during drainage tube removal – A rare case report

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ABSTRACT

Introduction and importance: Drainage tubes are commonly used to remove unwanted fluid after surgery. However, they are not indicated in all situations, and there is no evidence to support their common utilization.

Case presentation: A 31-year-old woman at 38 weeks of gestation with a history of five cesarean sections presented with lower abdominal pain following a tonic-clonic epileptic seizure. Emergency surgery was performed due to fetal distress, and the uterus was found to be ruptured. After delivering the baby and closing the uterus, a drainage tube was inserted into the pouch of Douglas. Two days after surgery, the right ampulla and infundibulum were eviscerated from the drain site during the drainage tube removal. A second surgery was performed to reduce the herniated uterine tube.

Clinical discussion: Drainage tubes are typically easily removed without complications. Some reported complications related to drainage tube removal include herniation, anchoring and suctioning of the uterine tube to the drainage tube, knotting with the colonic epiploica, and fracturing and retraction of the drainage tube due to adhesions. To the best of our knowledge, this is the first reported case of uterine tube evisceration during drainage tube removal.

Conclusion: Evisceration after drainage tube removal is very rare. We believe that this is the first report of immediate evisceration after the removal process. Such complications can be avoided with more restricted instructions for the use of drainage tubes and more researches on the reasons for these complications.

هلَّ سحب المُفَجِّر قد يُخَبِّئ مفاجآت للطبيب عندَ سَحْبِهِ ؟

- Case presentation
- A 31-year-old woman, gravida 5, para 5 (G5P5), at 38 weeks of gestation, presented to the emergency department of hospital. The patient's chief complaint was lower abdominal pain following a tonic-clonic epileptic seizure.
- Her obstetric history revealed five previous cesarean sections, with the last one being three years ago. The patient was diagnosed with epilepsy seven years ago and treated with sodium valproate.
- The medication was discontinued in the seventh month of pregnancy, but the patient reported taking one pill a few hours before to the seizure episode.



Upon inspection, the patient was pale and distressed, with a slim and underweight appearance. Her blood pressure was **100/70 mmHg**, and her pulse rate was **88 beats per minute**. Abdominal palpation revealed tenderness with a decrease in the expected uterine fundal height. The pelvic examination was normal. Echography imaging showed normal amniotic fluid and placenta location, with a femur length of 64 mm (33 week), biparietal diameter of 85 mm (34 week), and fetal heart rate of 100 beats per minute. **Considering the recent epileptic seizure, increased uterine contractions, patient's history of five cesarean sections, and fetal distress**, the doctors decided to perform an emergency cesarean section.

- The patient underwent an upper vertical incision, which revealed a ruptured uterus. During surgery, two units of blood and two units of plasma were transfused.
- The ruptured uterus was closed in two layers, and open drainage system with a 25 mm multichannel PVC drainage sheet was inserted in the right inguinal region.
- Two days after surgery, an unfortunate complication occurred during the removal of the drainage tube. The ampulla and infundibulum were stuck in the drainage tube, and during the removal process, they were pulled and herniated through a drainage incision

- The surgical team attempted to reduce the herniated structures without breaching the fascia of Scarpa, **but was unsuccessful**. Therefore, the remaining layers were reopened and the hernia reduced, **fallopian tube was not removed** because patient refused tube removal.
- As a precautionary measure and because of adhesions, another drainage tube was inserted on the opposite side to remove excess fluid and blood to increase healing and decrease the chance of infection.
- The patient was closely monitored in the hospital for a few days before discharge.

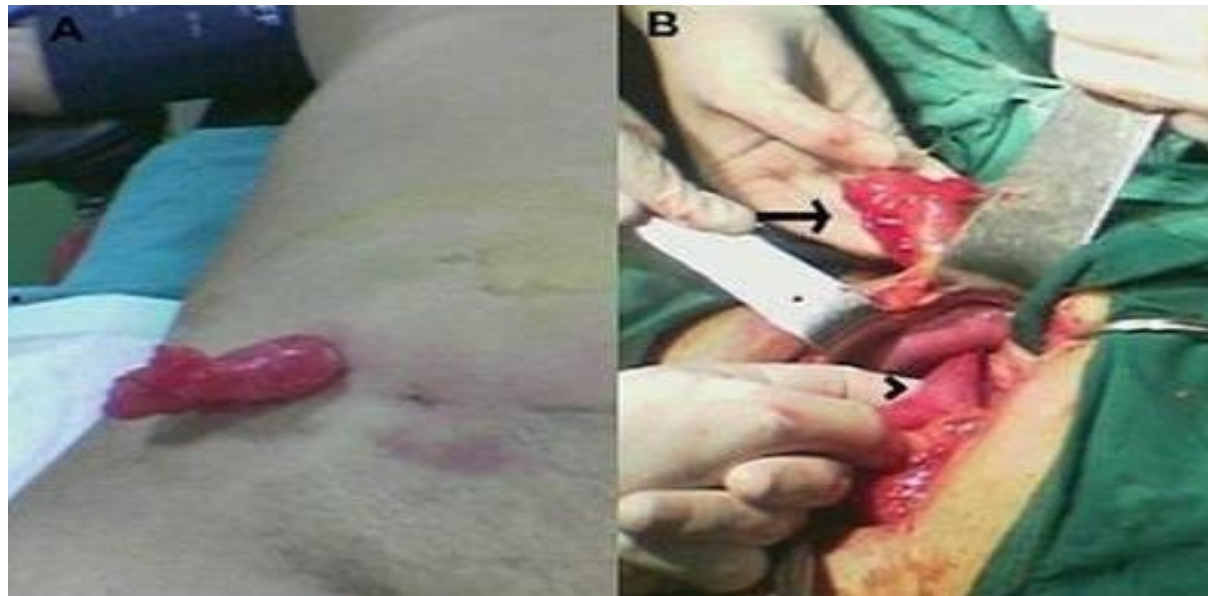


- **Discussion**

- Drainage tubes are commonly used after standard surgeries, including abdominal surgeries
- While most drains are safe, they may still lead to **various complications, such as vessel or tissue injury, infections, difficulties in removal, hernias and evisceration** .
- It has been reported that 0.65 %–2.5 % of patients may experience viscera herniation from the port site after laparoscopy ,with the small **in- testine being the most common organ to herniate** .Other organs that may herniate are the appendix, omentum, gall bladder, uterine tubes and ovaries



- Uterine tube herniation is a rare complication of drainage tube removal. Prior to this study, we found three cases of uterine tube herniation 24 h, 3 days and 4 days after drainage tube removal .
- Two other cases reported anchored and suctioned uterine tubes that were detected before removal of the drainage tube .
- Other reported complications include knotting with the colonic epiploica after emergency laparoscopy for an ectopic pregnancy , and fracturing and retraction of the drainage tube caused by adhesions.
- To the best of our knowledge, this case is the first to report evisceration of the ampulla and infundibulum of the right uterine tube from the drain incision immediately after removal of drainage tube.



- **Risk factors for herniation include:**
 - ✓ general weakness,
 - ✓ inadequate nutritional status,
 - ✓ obesity
 - ✓ , increased intra-abdominal pressure
 - ✓ chronic diseases (e.g., diabetes mellitus),
 - ✓ steroid intake and
 - ✓ stab incision
- The routine use of drainage tubes after surgery should be discouraged, and reserved for patient with expected complications



- Some recommend that the distal tip should not be coiled around the pouch of Douglas:
- **During insertion:**
 - ✓ abdominal drainage should never be placed in the surgical incision because of the weakness of the surgical wound,
 - ✓ and it is preferred to be passed obliquely so that the muscles can close the drainage tract.
- **During removal:**
 - ✓ negative pressure in the closed drainage system should be removed and 360° rotations should be applied to the drainage tube before withdrawing it.
- Forceful pulling out should be avoided when there is resistance, with the considering surgical reopening when attempts fail .
- The material type of the drainage tube is still unknown whether it matters or not.
- However, many studies that report herniation and evisceration have used different materials and systems

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