

Pelvic Abscess Caused by Retained Faecalith Following Laparoscopic Appendectomy

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Introduction:

Pelvic inflammatory disease and pelvic abscesses are usually a result of an ascending infection from the endocervix mainly

- *Neisseria gonorrhoeae* and *Chlamydia trachomatis* 25% of cases, *Gardnerella vaginalis*, anaerobes (including *Prevotella*, *Atopobium* and *Leptotrichia*) and other organisms commonly found in the vagina may also be implicated.

In this case, failure to respond to treatment, recurrent presentations, and history has risen concerns on the aetiology of the pathology.

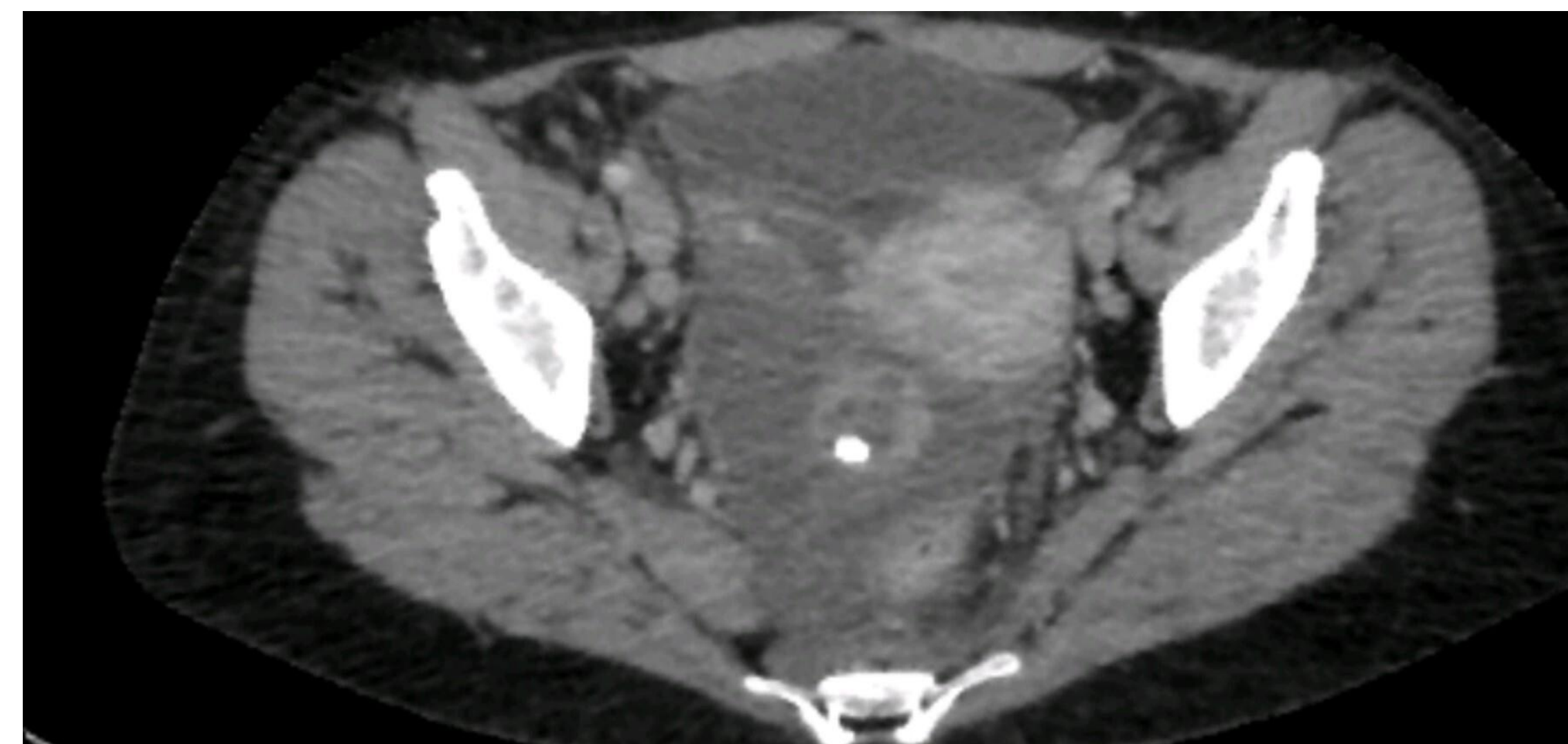
Patient description:

50-year-old female who was admitted to our emergency Gynaecology assessment unit with right iliac fossa pain, fever, and yellow vaginal discharge. Laboratory findings showed significantly raised inflammatory markers. Pelvic ultrasound revealed free fluid in the pelvis surrounding a 4.9-cm soft tissue adnexal lesion. Antibiotics were started, and improvement was noticed; hence, the patient was discharged with a plan to continue antibiotics and to arrange an MRI. Two weeks later, the patient was seen again, and an MRI revealed a new right-sided hydrosalpinx measuring 6.4x5x6.3 cm, with fluid collection in the POD measuring 4.9x6.8x4.5 cm, consistent with a pelvic abscess. The patient was then admitted for intravenous antibiotics and was discharged after 24 hours on oral antibiotics for 14 days. The patient was reviewed again. A follow-up MRI four months later revealed a significant reduction in the size of pelvic abscess. A plan was made to refer the patient to general surgeons.



Intervention:

Ten days later, the patient returned for the fifth time, complaining of worsening pain, an offensive discharge, and diarrhoea. The majority of TOAs are diagnosed in reproductive-age patients, in this patient lacking risk factors, poor response to standard antibiotics, and onset of symptoms following surgery raised concerns for surgical complication rather than PID related abscess. The surgical operative notes were reviewed and noted spillage of faecal contents during the appendectomy. A repeat CT scan showed a pathognomonic picture of a retained faecalith in the fallopian tube. A laparoscopic right salpingectomy was done, and the patient had an uneventful recovery and was discharged following the procedure.



Discussion:

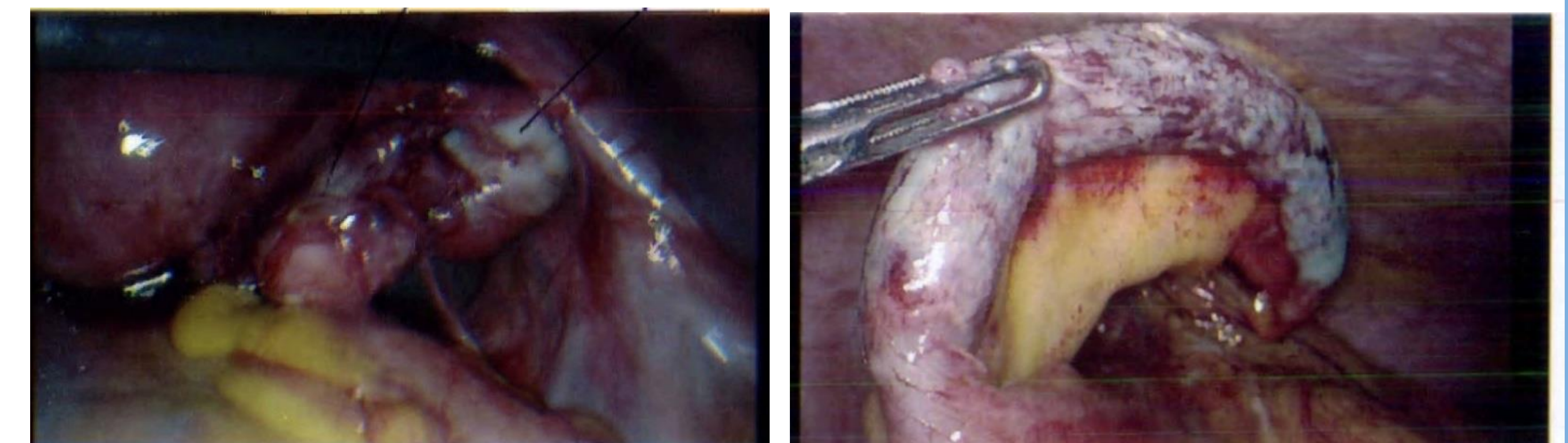
Similar cases been reported, although rare:

Retained faecalith following laparoscopic appendectomy: a case of recurrent intra-abdominal abscesses from a retained faecalith in the intramuscular layers of the iliacus in a patient whose initial diagnosis of an acute appendicitis was delayed (Kim et al., 2021).

Faecolith migrating from the appendix to produce liver abscess after sub-hepatic laparoscopic appendectomy: faecalith migrating into the liver parenchyma following intraoperative hepatic injury and producing a liver abscess (Kumar et al., 2015).

In both studies it was described that retained faecalith, although rare, can happen as a result of dropped faecalith during appendectomy or due to expulsion from perforated appendix. There were discussions on how to reduce this complication and one is the use of endoscopy bags for retrieval of the appendix.

If suspected faecalith, meticulous retrieval of the specimen is essential to avoid further spillage. The specimen should be kept in saline not formalin to allow histopathology confirmation of faecalith, although CT findings can be pathognomonic.



Conclusion and learning points:

It is prudent to note that not all cases of TOAs are associated with PID, when patients do not have PID risk factors, clinicians should have high index of suspicion. Management will vary according to underlying cause and should entail MDT approach. The optimal duration of antibiotic therapy before deciding to proceed with surgery is variable 24 to 48 hours is recommended. Aim for drainage and washout.

Postmenopausal women should have low threshold for intervention, incidence 1.7%, associated malignancy 47% (Protopapas et al., 2004).