

Perforated appendicitis and Taenia colonisation in pregnancy

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Case Summary

A 25-year-old primiparous female at 32 weeks gestation had recurrent presentations to birth unit with atypical abdominal pain. She has multiple speculum examinations and CTG assessments, which provided false reassurance. As her pain became more localized to the right iliac fossa, MRI abdomen was organized, which indicated acute appendicitis (Fig 1). Intraoperatively, she was noted to have perforated appendicitis which caused significant post operative pain and increased her risk of sepsis. She remained in hospital for 2 weeks and went into preterm labour at 36 weeks gestation. After her normal vaginal birth, she required interventional radiology guided drain insertion to manage and intraabdominal collection (Fig 3) that had developed as a consequence of perforation.

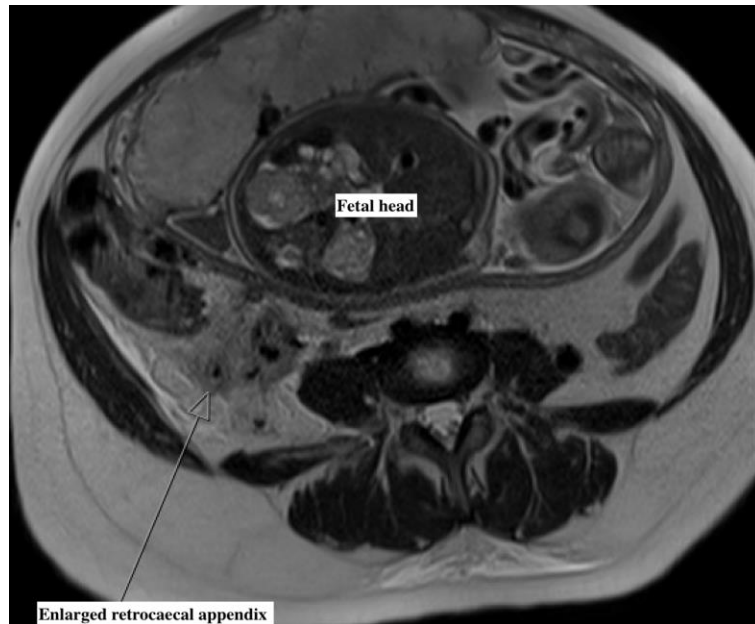


Fig 1. MRI Abdomen: The appendix is enlarged measuring 12 mm in AP diameter (normal up to 6 mm). There is oedema and within the lumen of the there are 2 appendicoliths and evidence of pus.

Histopathology:

Acute suppurative appendicitis with parasitic infection. Morphology suggestive of Taenia species (tapeworm). Example of this seen in Fig 3.



Fig 2. Taenia sp.

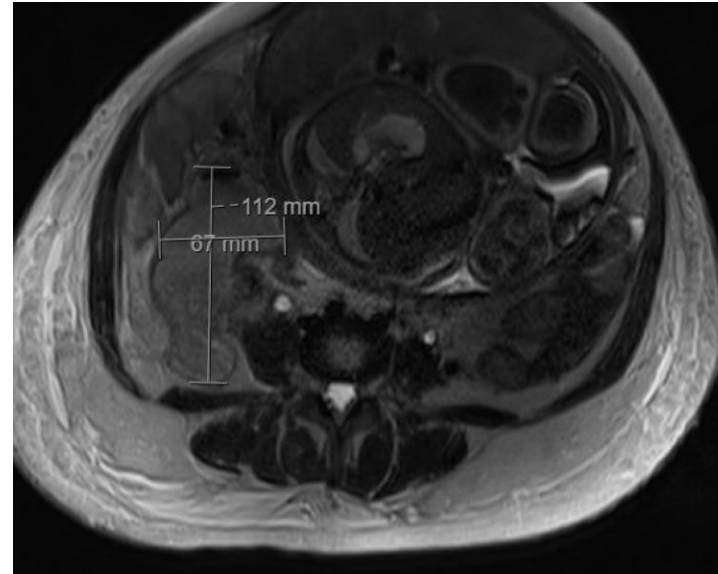


Fig 3. MRI Abdomen (post appendectomy: 12 mm x 67 mm collection

Learning Points

1. Acute appendicitis should be a differential diagnosis for non-specific abdominal pain in pregnancy. In the third trimester, upward migration of the appendix due to the gravid uterus can result in localisation of pain that is not characteristic of appendicitis. This can lead to delays in diagnosis, which can compromise both maternal and fetal wellbeing.
2. Although ultrasound is usually the first line investigation for suspected appendicitis in pregnancy, MRI should be considered, if available, to confirm diagnosis. In this case, although ultrasound was attended, MRI ultimately led to diagnosis of appendicitis and the post operative complication.
3. General anaesthetic and abdominal surgery in pregnancy can be complex to manage. In this case, both were essential. The caecum is variably positioned in pregnancy, which can make operative management of appendicitis difficult. This procedure was performed laparoscopically with atypical lap port placement due to the gravid uterus. Avoidance of an open procedure also reduced risk of an incisional hernia.
4. Immunosuppressive affects of pregnancy can trigger latent infections, such as parasitic colonisation, to become active. Management of uncommon infections in pregnancy can be difficult as limited information is available regarding the safety of the treatments in pregnancy and breastfeeding.

Management and Outcome

Following appendectomy and diagnosis of Taenia sp., patient received antihelminthics, Praziquantel 900 mg (10 mg/kg) as a single oral dose. Prior to this, the patient had an MRI brain to exclude neurocysticercosis. The patient also received > 2 weeks of broad spectrum IV antibiotics and underwent interventional radiology (IR) guided aspiration of the collection. A penrose drain remained in situ to allow for drainage of the remaining collection and to prevent build up. Following preterm birth at 36 weeks, the neonate was born with APGARs 9 and 9 and weighing 3.1 kg. Baby remained well and with mum during the postpartum period.