

Fungal splenic abscess secondary to bariatric tourism in an immunocompetent patient

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Abstract

Aim

A 21-year-old female with a 5 day history of abdominal pain, vomiting and jaundice on a background of gastric sleeve placement in Turkey 3 months previously.

Diagnosis

Diagnostic imaging revealed a splenic collection. Aspiration and culture of fluid revealed candida albicans growth.

Treatment

Initially treated with antibiotics, ultrasound aspiration was performed when collection enlarged. Subsequently treated with parenteral antifungal medicines when candida infection confirmed. Discharged on outpatient intravenous antifungal therapy.

Discussion

This is the second documented case of a fungal abscess following laparoscopic sleeve gastrectomy. Splenic abscess is a rare clinical entity and an even rarer complication of bariatric surgery. The rise in bariatric and cosmetic tourism in Ireland may mean increasing presentations like this to Irish hospitals.

Introduction

Splenic abscess is a rare presentation which may be caused by infection, splenic infarction, neoplasia or immunodeficiency¹. Bariatric procedures, such as laparoscopic sleeve gastrectomy (LSG), are a very rare cause². While typically polymicrobial, splenic abscess may have a fungal aetiology, most commonly *candida*³. Infections in Irish patients due to

cosmetic tourism are reportedly increasing⁴. This is only the second reported case of a fungal splenic abscess caused by an LSG procedure⁵.

Case report

A 21-year-old female presented to casualty with a 5 day history of epigastric pain, vomiting and jaundice. The patient had a laparoscopic sleeve gastrectomy in Turkey 3 months previously. On examination tenderness of the epigastrium was noted. Blood tests revealed raised inflammatory markers and a cholestatic pattern on liver function tests. The patient was admitted with presumed acute cholecystitis. Ultrasound (US) and magnetic resonance cholangiopancreatography (MRCP) revealed splenomegaly and a 4cm gas-fluid collection in the spleen. The gall bladder, biliary tree and pancreas were unremarkable. Computed tomography (CT) of the abdomen showed a 5.2cm collection representing a small splenic abscess.

Initially treated conservatively with antibiotics, ongoing abdominal pain prompted a further US which showed enlargement of the splenic abscess. Repeat CT showed increase in size of the abscess as well as the development of a large perisplenic abscess. At this point an ultrasound-guided aspiration of the perisplenic collection was performed. Subsequent culture of the aspirate grew *candida albicans* which was sensitive to fluconazole. Following several weeks of parenteral antifungal and antibiotic therapy the patient was well enough to be discharged with outpatient antifungal therapy in the community. The patient was subsequently followed-up in the outpatient clinic for the intraparenchymal abscess. The residual abscess was monitored with outpatient US and was shown to be reducing in size. Interval US 6 months post admission showed total resolution of the perisplenic collection and a <2cm residual hypoechoic area in the parenchyma. As the patient was asymptomatic, at this point she was discharged from the clinic.

Discussion

Splenic abscess is an extremely rare complication of LSG². Fungal abscess is rarer still, this being only the second documented case in the literature⁵. The pathogenesis of splenic abscess following bariatric surgery may be due to leak of contents from the staple line, splenic ischaemia secondary to thrombosis or iatrogenic injury during surgery². Due to the delayed presentation (3 months) the precise mechanism in this case is unclear. Management of splenic abscess is dependent on the size of the collection and its degree of loculation⁶. While small abscesses may respond to conservative treatment, larger or densely loculated ones require source control with percutaneous drainage, as in this case, or, commonly, splenectomy⁷. This case also highlights the importance of serial imaging to assess response to empiric treatment and consideration of alternative pathogens when unresponsive or deteriorating². Furthermore, this case highlights an increasingly reported

trend in Irish healthcare: complications of cosmetic and bariatric tourism⁴. Multiple case series relating to the impact of this phenomenon on the health service have been reported in recent years and this case is a further example^{4, 8}.

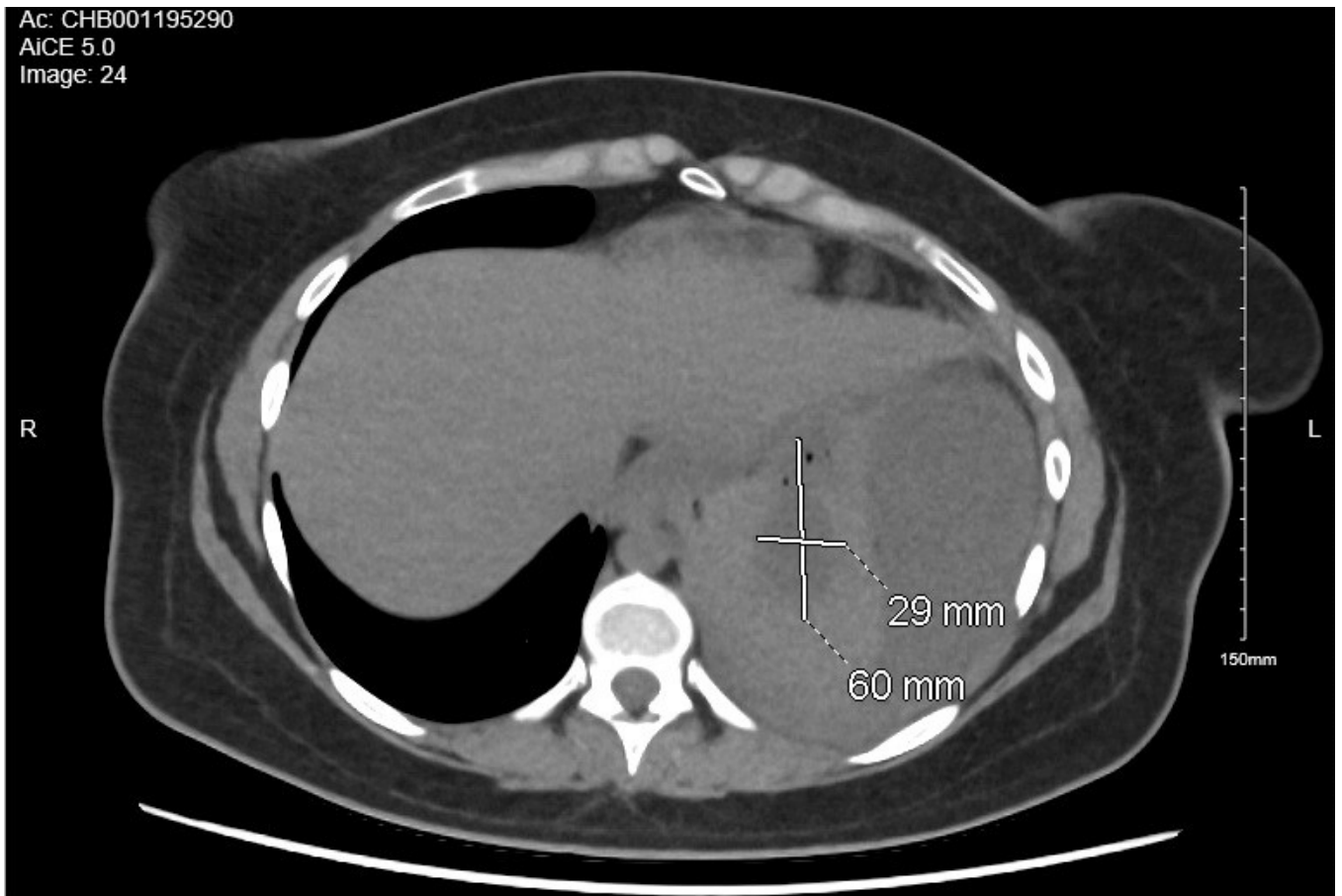


Figure 1: Axial CT abdomen view of intraparenchymal abscess

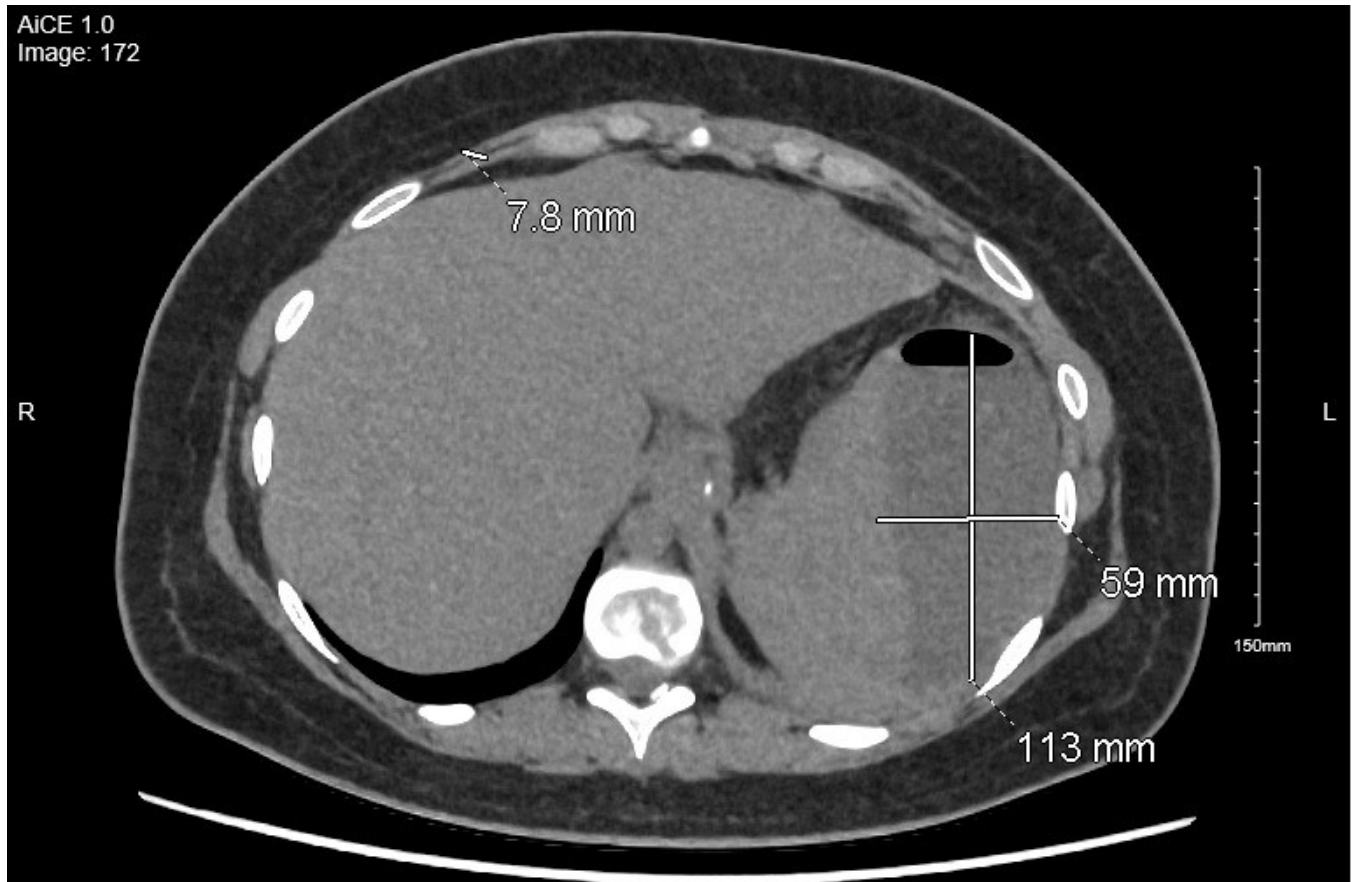


Figure 2: Axial CT abdomen view of perisplenic abscess

Declarations of Conflicts of Interest:

None declared.

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