Case Report

DOI: 10.5455/2320-6012.ijrms20130526

Ruptured splenic abscess presenting as peritonitis: a case report

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Received: 5 April 2013 Revised: 8 April 2013 Accepted: 9 April 2013

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ABSTRACT

Incidence of splenic abscess is a rare -0.05-0.7% and rarer still is the rupture of the abscess. We present a patient who presented with features of peritonitis and investigations and emergency laparotomy revealed a ruptured splenic abscess with dense adhesions between spleen and diaphragm, stomach, splenic flexure, kidney and lateral abdominal wall due to perisplenitis. Patient was treated with emergency splenectomy and antibiotics. Patient recovered although after a stormy immediate post operative period due to septicaemia. This case is presented owing to the rarity of presentation.

Keywords: Splenic abscess, Peritonitis, Ruptured splenic abscess

INTRODUCTION

Abscess of the spleen with peritonitis a rather rare clinical entity. Very few cases have been described so far in the international literature. Most of these refer to patients with recognized risk factors. These include the synchronous presence of conditions that compromise the immune system, such as endocarditis, diabetes mellitus, congenital or acquired immunodeficiency and the administration of immunosuppressive medication (e.g. post-transplantation or as part of the treatment of connective tissue disorders). On the other hand, splenic abscesses are most uncommon in the general population. From an epidemiological point of view, they are more frequently detected in middle-aged and older individuals, with no obvious preference for either sex.

CASE REPORT

A 30 year old patient presented in the emergency OPD with complaints of acute abdominal pain of a few hours duration associated with one episode of vomiting. Patient

had history of dull aching pain in left hypochondrium on and off for 3 months for which he used to take some analgesics. There was no history of fever.

On physical examination patient was febrile, pulse 92/min, respiration 30/min, blood pressure recorded 100/70 mmHg. Abdomen was distended with generalised tenderness, guarding and rigidity. Routine investigations revealed increased leucocyte count with majority of neutrophils. X-ray abdomen in erect posture did not show features of hollow viscus perforation.

USG abdomen done elsewhere on the previous day showed splenic abscess and presence of peritoneal collection. With the CECT scan abdomen showing splenic abscess with collection in peritoneal cavity (Figure 1) a possible diagnosis of ruptured splenic abscess was made. On emergency exploratory laparotomy, about 1000 ml of frank pus was drained from the peritoneal cavity. The source of abscess was traced to the spleen. On enlarging the opening of the abscess cavity further, 250 ml more of pus was drained. The ensuing

splenic bleed could not be controlled leading to a decision to do splenectomy. There were dense adhesions between the spleen and stomach, diaphragm, lateral

abdominal wall and colon. Hence the thinned out spleen could only be removed piece-meal. Patient needed 4 units of intra operative blood transfusion.

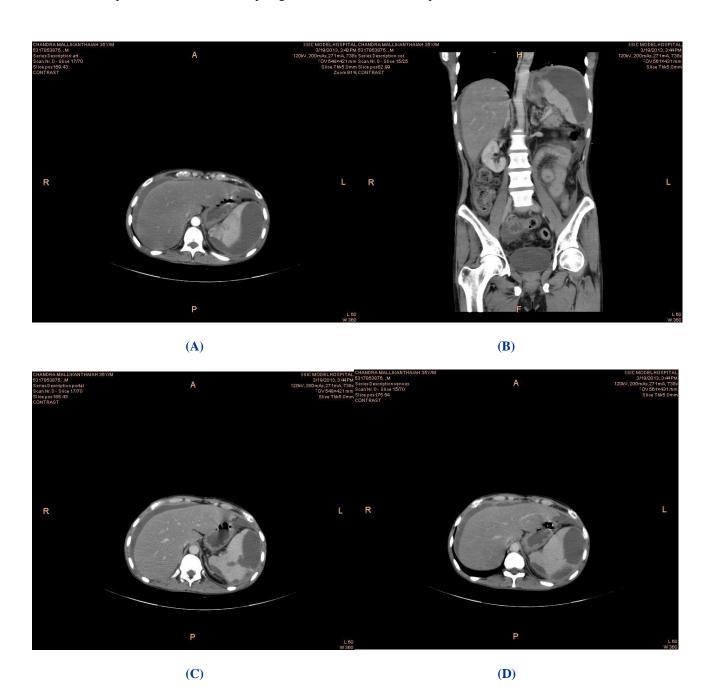


Figure 1: CT scan images A. Arterial phase, B. Coronal, C. Portal phase and D. Venous phase.

Early post operative atelectasis with pneumonia and septicaemia were managed effectively. Pus culture showed growth of Enterobacter. Patient received the relevant antibiotics for 8 days. He also received triple vaccine against pneumococci, meningococci and H. Influenza. Post operative wound infection was managed with repeated dressings and appropriate antibiotics.

Patient responded well to treatment and was discharged from the hospital.

DISCUSSION

About 600 cases of abscess of the spleen are reported in the international literature so far.²⁻⁷



Figure 2: Resected spleen specimen.

The source of splenic infection can be:

- Haematogenous spread from a source of infection like SBE, UTI, Typhoid, Paratyphoid, Malaria, Tuberculosis, Pneumonia, Otitis, Mastoiditis, Pelvic infection etc.
- Splenic trauma getting infected.
- Infection of the splenic infarct due to vasculitis, haemoglobinopathies, etc.
- Contiguous spread of infection from pancreas, diverticulitis of colon, Stomach perforations, sub phrenic abscess etc.
- Patients with immunocompromised conditions like HIV, Diabetes, Transplant patients on immunosuppression.

Treatment options available are medical and surgical management.

Medical management: Early supportive care and parenteral broad-spectrum antibiotics are of paramount importance. Antibiotic coverage should target the presumed bacterial strains.

Surgical management includes: laparotomy and splenectomy, laparoscopy and lap assisted splenectomy, percutaneous drainage of the abscess and antibiotic therapy.

CONCLUSION

Although splenic abscess is rare, it has high mortality rate if there is delay in diagnosis and treatment. There may be three eventualities in a splenic abscess.

- Patient may live with a deep seated small asymptomatic abscess.
- 2. A small abscess may heal with medication.
- 3. Patient may die due to splenic abscess.

Early diagnosis and treatment with a combination of computer tomography, sonography study and clinical feature is the best chance to save the patient from a certain death.

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DOI: 10.5455/2320-6012.ijrms20130526 **Cite this article as:** Shetty MK, Kagali NA, Latha GA. Ruptured splenic abscess presenting as peritonitis: a case report. Int J Res Med Sci 2013;1:165-7.