Jejunal perforation by a foreign body

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Citation

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Abstract

A 52-year-old woman was referred to our surgical division for a 3-months history of abdominal pain, fever and leucocytosis. The abdominal computed tomography (CT) scanning showed only fluid spillage and minimal bowel dilatation. An explorative laparotomy was necessary with diagnosis of jejunal perforation by a foreign body (fish bone) with subsequent ileal resection. Even if intestinal perforation from foreign body is a really rare event, it should be considered in differential diagnosis of acute peritonitis.

INTRODUCTION

The diagnosis of small bowel perforation due to foreign bodies or fish bone is a rare event because most of these can pass through the gastrointestinal tract uneventfully. CT scan could help to detect foreign bodies; however, it did not show an optimal sensitivity. Endoscopy and surgery are fundamental for diagnosis and therapy. We report a rare case of jejunal perforation from foreign body (fish bone).

CASE REPORT

A 52-year-old woman was referred to our surgical division for a 3-months history of abdominal pain, fever and leucocytosis. The abdominal computed tomography (CT) scanning (Figure 1) made in another institution showed only a fluid spillage and minimal bowel dilatation. Furthermore, the patient previously (six weeks before) underwent an explorative laparoscopy for suspected gynaecological disease which resulted negative. Then the patient was admitted to our ward with suspected malignant pathology. An explorative laparotomy was necessary for worsening clinical conditions and diagnosis of jejunal perforation by a foreign body (fish bone) was made (Figure 2, 3).

DISCUSSION

Most of foreign bodies ingested pass through the gastrointestinal (GI) tract uneventfully within 1 week[1]; the occurrence of bowel perforation is rare (less than 1%). In the present case a jejunal perforation with abscess due to a 4cm fish bone is reported. The patient underwent ileal resection.

The diagnosis of small bowel perforation is very difficult. CT scan can really help in pre-operative diagnosis; however, small fish bones or fins are difficult to recognize pre-operatively. CT scan showed a sensitivity of 71.4% in the detection of intra-abdominal fish bone[2]. In recent series of gastrointestinal tract perforation by foreign body, numerous risk factors have been reported[1,2]: alcohol or drug abusers, selected professions such as carpenters or dressmakers, persons who eat rapidly and/or with denture problems.

In a special way, this last group without capacity of identifying small or hard items in forming a bolus, have a higher risk of foreign body ingestion. Furthermore, the dietary habits have a relevant role in the type of foreign bodies ingested with chicken bone more frequently reported in Mediterranean countries and fish bone in the Asiatic countries.

In the majority of cases reported, ileocecum or recto-sigmoid tract are more frequently affected by perforation as sites of acute angulation.

Clinical presentation is extremely variable depending on the site of perforation and extension of peritonitis. It can mimic appendicitis or other acute abdominal conditions.

In most of the cases, diagnosis is obtained only with surgery. Laparoscopy has been used in the diagnosis of GI perforation from foreign body but it did not show high success rates. In this case, previous laparoscopy was not able to show any pathology and only final laparotomy identified the fish bone perforation.

For this reason, even if intestinal perforation from foreign body is a rare event, it should be considered in differential

diagnosis of acute peritonitis.

Figure 1

Figure 1. Abdominal computed tomographic scan showed fluid spillage.

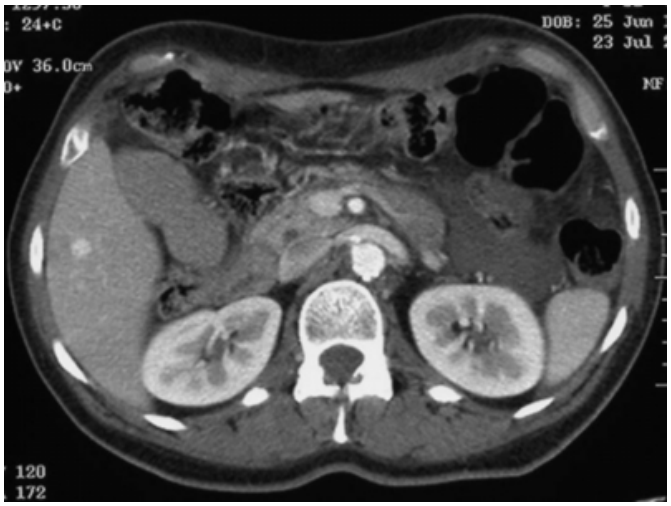


Figure 2

Figure 2. An intra-operative photograph demonstrating a 2.5cm ileal mass

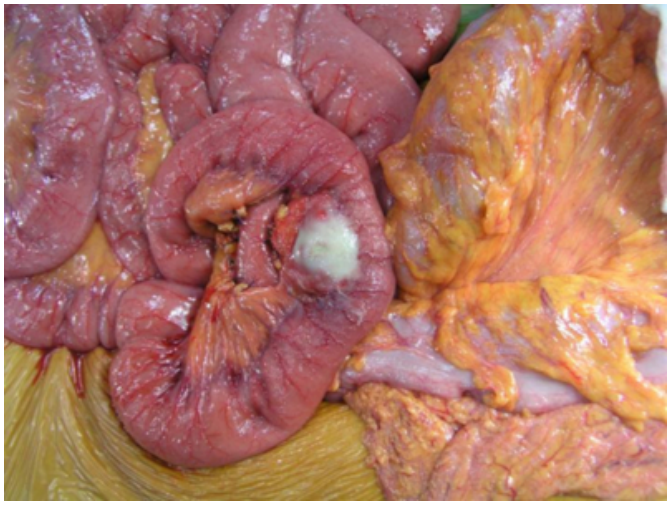
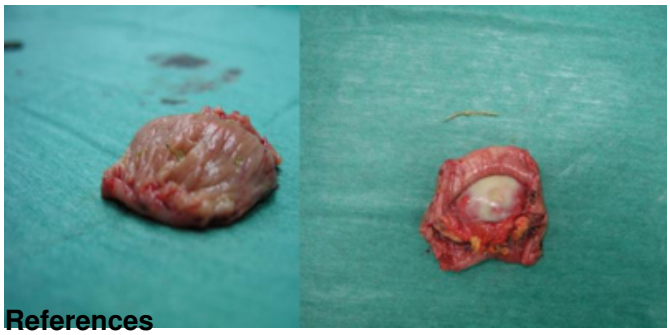


Figure 3

Figure 3. Intra-operative photograph showing the fish bone



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