Unusual presentation of more common disease/injury

Be careful what you wish for: an ingested foreign body masquerading as cancer

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Summary

We present a case in which a patient with suspected colorectal cancer, referred to the surgical outpatient clinic, was subsequently found to have a chicken wishbone apparently perforating the sigmoid colon. This demonstrates the complexities of diagnosis and management of an unusual presentation of ingested foreign body. This case is a useful learning point in consideration of differential diagnosis in the presentation of an apparently malignant lesion.

BACKGROUND

Ingestion of a foreign body is not uncommon with most foreign bodies passing through the gastrointestinal tract without problem. There are a number of cases reported in the literature in which foreign bodies have resulted in perforation, resulting in the patient presenting acutely to hospital, often requiring an emergency procedure.¹ In this circumstance, the cause is frequently only demonstrated at operation.

We present a case in which a patient with suspected colorectal cancer, referred to the surgical outpatient clinic, was subsequently found to have an apparently perforating foreign body.

CASE PRESENTATION

A 63-year-old man was referred to the surgical outpatient clinic by his general practitioner as a suspected cancer patient with a 2-month history of significant weight loss and anaemia (haemoglobin 8.9 g/dl, mean corpuscular volume 85 fl). At this time, he complained of no other gastrointestinal symptoms.

Past medical history included only hypertension, which was well-controlled by perindopril.

On examination in clinic he was found to have a palpable mass in the left upper quadrant.

INVESTIGATIONS

Urgent sigmoidoscopy revealed an impassable polypoid lesion at 22 cm. Biopsies were taken, reported as chronic inflammatory change, including an adenomatous polyp demonstrating low grade epithelial dysplasia.

CT scan of the abdomen demonstrated a large mass in the descending colon, containing a radio-opaque curvilinear structure, appearing to perforate the bowel (figure 1). Although there were small peripherally located blebs of air, no intraperitoneal free-air was demonstrated (figure 1). No abnormality of the liver, kidneys, spleen and pancreas was seen and he had a normal CT thorax.

DIFFERENTIAL DIAGNOSIS

Adenocarcinoma of the colon; lymphoma of the colon; carcinoid tumour; diverticular mass; foreign body.

TREATMENT

In view of suspicious histology and CT findings, it was agreed with the patient to perform a left hemicolectomy.

At operation, a large mass in the descending/sigmoid colon was found attached to the lateral abdominal wall, paracolic gutter and perinephric fat. The mass was excised en bloc and an end colostomy brought up to the left iliac fossa.

OUTCOME AND FOLLOW-UP

Histology of the excised mass showed no evidence of malignancy, but rather diverticular disease with evidence of acute and chronic inflammation and stricturing. The radio-opaque structure was found to be a chicken wishbone, lying within one of the diverticula, although not actually perforating the bowel.

Further discussion with the patient, following the procedure, could not identify an event during which he may have swallowed the bone.

DISCUSSION

A literature search revealed a large number of foreign body ingestions presenting with an acute abdomen reported in the literature. These include perforation, abscess formation, obstruction or gastrointestinal haemorrhage. One review demonstrates more than 300 cases presenting in this way. The common causative objects include fish bones, chicken bones, cocktail sticks, toothpicks and dentures.^{1 2}

Risk factors for ingestion included the very young or old, high alcohol intake, psychiatric history or use of dentures. The latter association may result from the loss of sensory feedback from the palate by the presence of the dentures.¹

Patients frequently do not recall the event of ingesting the foreign body, as in this case. While the subject did not have

Figure 1 CT image demonstrating calcified structure in sigmoid colon.

dentures, or any of the other aforementioned risk factors, he did comment that he often ate quickly without chewing his food.

The site where a foreign body is likely to perforate the gastrointestinal tract is frequently at areas of narrowing or angulation, such as the ileocaecal valve or the recto-sigmoid junction. There have been several previous reports of perforation occurring at the point of a neoplastic stricture often found incidentally following histological examination of the specimen.^{3–5} It has been suggested that the tumour provides a point for the foreign body to impact and perforate where it may otherwise have passed out of the bowel without problem.

Likewise, in this case it is not possible to demonstrate if the colonic mass was a result of chronic inflammation from the foreign body present in a diverticulum or, rather, if a diverticular stricture was the point of impaction of the body.

There is a variety of treatment modalities described for foreign body perforation. This is dependent on a number of factors, including the site and extent of the perforation. Open resection of bowel and formation of colostomy is frequently indicated, as in this case. Also, colonoscopic retrieval of a foreign in a patient with a chronic inflammatory mass has been previously described—allowing a means of both diagnosis and treatment.⁶

Pre-operative CT scanning has an important role in guiding treatment where possible. This allows demonstration of the foreign body as well as assessment of evidence of malignancy, such as local lymphadenopathy and other organ involvement.

This case is important as it demonstrates the complexities of diagnosis and management of an unusual presentation of ingested foreign body. The case is also unusual as, on histological examination, the foreign body did not completely perforate the bowel, as is the frequent presentation, but rather lay within a diverticulum.

Learning points

- ▶ This case highlights the considerations of differential diagnosis with a colonic mass.
- ▶ Ingestion of foreign body is not uncommon with a variety of modes of presentation, including both acute and more insidious onset.
- ▶ Management of complications of ingestion of a foreign body should be guided by imaging and can include both open and intraluminal techniques.

Competing interests None.

Patient consent Obtained.

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