Case Report

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A rare cause of right iliac fossa lump: contained fish bone perforation of caecum

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ABSTRACT

Ingested foreign bodies usually pass uneventfully through the gastrointestinal tract but few of them can cause symptoms. They can get stuck at acute angulations or narrow part of intestine and can perforate leading to localized to generalized peritonitis, collection or abscess formation. We describe a case of 59 year old gentleman who presented with pain in right iliac fossa with fever and a hard, tender lump. Initial investigation revealed a mass in right iliac fossa adherent to anterior abdominal was in right iliac fossa region with a foreign body inside. Patient was managed with exploratory laparotomy, removal of a fish bone from cacecum and limited right hemicolectomy. Fishbone perforation of caecum is a rare entity. Careful corroboration between patient's presentation and radiological findings with a high index of suspicion is needed for pre-operative diagnosis.

Keywords: Caecal perforation, Fish bone, Right iliac fossa lump, Gastrointestinal foreign body

INTRODUCTION

Ingestion of foreign body and subsequent complications are frequently described entity, especially in pediatric population. However acute abdominal emergencies secondary to bowel perforation due to fish bone is not a very common entity. Though small bowel is the commonest location of perforation reported in literature, perforation can occur at any part of gastro-intestinal tract. We present the first case of caecal perforation due to fish bone in a 59-year-old gentleman presenting as right iliac fossa hard lump.

CASE REPORT

A 59 year old gentleman presented with pain in right iliac fossa and fever for last 7 days with history of nausea vomiting. No history of bleeding per rectum or constipation, weight loss was present. On examination he was febrile with blood pressure of 100/78 and pulse rate

of 100 per minute. There was a 6×7 cm firm lump palpable on right iliac fossa, which was tender on palpation. The lump was fixed with anterior abdominal wall and was close to right iliac bone.

Blood investigations revealed Hb of 11.5 and leukocytosis (10,000). Ultrasonography (USG) showed ill-defined heterogenous (predominantly hypoechoic) lesion in right iliac fossa (RIF) with increased echogenicity in surrounding region. Appendix could not be visualized separately. Patient was started on parenteral antibiotics and a CECT whole abdomen was performed. It showed mass in RIF arising from caecum with caecal wall thickening and a foreign body with liquid component inside it (abscess) (Figure 1).

A decision of exploratory laparotomy was made under general anesthesia. On exploration, omentum was found to be densely adherent to a mass lesion and anterior abdominal wall in RIF. The mass was densely adhered with abdominal wall. On finger dissection the mass could be separated from abdominal wall. Small amount of thick pus along with a foreign body (approximately 2.6cm long fish bone) came out from abdominal wall after separation of the lump (thickened caecum) (Figure 2). On close inspection, the foreign body was found to a fish bone. There was approximately 3X4cm area of thickening found in the caecum around the area where it was attached to the abdominal wall. Appendix and rest of the bowel was found to be healthy. Limited right hemicolectomy was performed with ileo-ascending anastomosis (Figure 3).

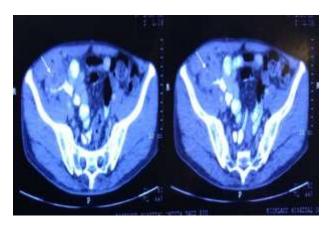


Figure 1: CECT showing heterogeneous mass in right iliac fossa region, which is adherent to anterior abdominal wall with air foci inside and a foreign body, arrow marking the foreign body.

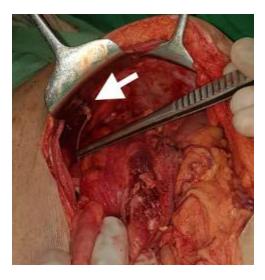


Figure 2: Fish bone coming out of abdominal wall after separation of the lump, marked by arrow.

Patient had an uneventful postoperative recovery and discharged on postoperative day five. Histopathology report revealed nonspecific inflammatory response with no evidence of malignancy. He is on regular follow up on outpatient clinic without any symptoms 12 months after surgery.

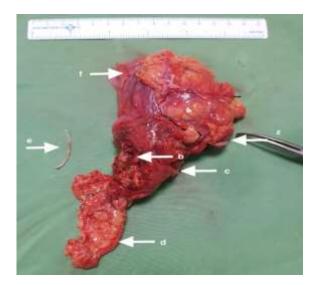


Figure 3: Excised specimen of limited right hemicolectomy: a) terminal ileum, b) caecal wall which was adherent to anterior abodominal wall (perforation site) with associated wall thickening, c) Healthy appendix, d) Omentum adherent to the anterior abdominal wall at the region of caecal perforation, e) Fish bone, f) Ascending colon.

DISCUSSION

Ingestion of foreign body is not a rare phenomenon especially in pediatric, psychiatric population. If it reaches stomach, most of the foreign bodies pass on its own while only <1% present as complication secondary to obstruction or perforation.² Sharmast et al have reported a series of 21 cases bowel perforation due to ingested foreign body like fish bone, chicken bone, tooth pick and metallic staples.1 The chicken bones were the leading cause of bowel perforation in the series, however 33% of the patients had perforation secondary to fish bones and ileum was found to be the commonest site. A number of other case reports have also reported ileum as the site of fish bone impaction and perforation.³ Other less common potential sites of perforation are the appendix, duodeno jejunal flexure, transverse & sigmoid colon.^{1,4} However only once case report of caecal perforation presenting as appendicitis has been reported till date and no documented reports of caecal perforation presenting as right iliac fossa mass are present in literature till now.5

Fish being a very common food in India, the history of having eaten it before the onset of symptoms is not of much significance. Symptoms arising from fishbone perforation usually mimic other acute intra-abdominal surgical conditions and diagnosis is seldom made preoperatively.⁶ In our case, patient history was nonspecific and the clinical examination revealed a tender right iliac fossa hard lump mimicking appendicular lump or perforated malignancy.

Abdominal radiographs are of limited value in diagnosis of these cases. USG can detect foreign body and associated fluid collection or abscess, but its accuracy is dependent on dimension and position of foreign body and presence of bowel gas. CT is a better modality and it can confirm the diagnosis of perforation with higher accuracy. Pneumoperitoneum is usually not seen. CT can also confirm the presence of a foreign body as well as can specify its position and associated abscess or collection. In our case, CT had given a preoperative diagnosis of foreign body, but it could not rule out malignancy due to associated wall thickening in caecum on a background of hard fixed right iliac fossa mass.

Fish bone perforation of bowel usually presents as acute abdomen of uncertain origin in most of the patients and definitive diagnosis is made only intra-operatively. Though this groups of patients are usually managed with exploratory laparotomy, few case reports laparoscopic management of perforation of appendix and small bowel secondary to foreign body has also been reported. In our patient, as we had a doubt about presence of coexisting malignancy in caecum, we had planned for exploratory laparotomy and a (limited) resection-anastomosis was performed for the patient.

CONCLUSION

Corroboration between patient's history, clinical signs, symptoms and radiological findings is necessary and a high index of suspicion is needed for pre-operative diagnosis of fishbone bowel perforation.

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