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CHALLENGING DIAGNOSTIC DILEMMA OF RIGHT ILIAC FOSSA PAIN ; SURGICAL SURPRISE

Surgery

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ABSTRACT

INTRODUCTION - Diagnosis and management of acute abdominal pain is an ongoing challenge. Right iliac fossa pain remains a dilemma, debate & controversy. In spite of portfolio of investigation in this new millennium, clinical evaluation remains gold standard, but on opening Pandora's box surgical surprises are inevitable. Fish bones are amongst the commonest foreign bodies in the upper aero digestive tract but perforation or penetration of intestinal tract is very rare. This case report describes fish bone penetration of terminal ileum. The case was diagnosed as acute appendicitis, as pre operative diagnosis is usually difficult because ingestion is usually accidental and history is inconclusive.

KEYWORDS

Fish bone. Perforation. Terminal ileum

Case report -

A 42 year old serving soldier transferred in from peripheral hospital as case of acute appendicitis. He presented with right lower abdominal pain, fever with chills and rigor for 3 days. There was no history of vomiting, anorexia and obstipation. On physical examination, he was anxious, febrile (38.2C) with tachycardia (Heart rate- 112/min). Abdominal examination revealed right iliac fossa rebound tenderness with voluntary guarding, Rovsing's sign was positive, per rectal examination revealed tenderness in right lateral rectal wall. There was no leucocytosis (WBC- 10100/cmm). Chest radiograph revealed no free air under diaphragm (fig 1). An abdominal plain radiograph revealed no remarkable features except for increased air in small intestine in right lower abdomen. There was no radio opaque shadow suggestive of fish bone (fig 2).

Patient was taken for emergent appendicectomy by Lanz incision later converted to Rutherford Morrison muscle cutting incision. Intraperitoneally, dense adhesions of omentum and small bowel were seen with no inflammation of appendix, thus raising suspicion of other pathology. On exploration of terminal ileum there was a perforation of ileum 1 feet from ileocaecal junction with bone partially intraluminal and partially extra luminal (fig 3). The area of penetration was on the antimesentric side so it was easily brought up to the parieties from the appendicectomy incision. No peritoneal contamination was noticed as bone was occluding the perforation. There was presence of minimal pus flakes (fig4). The fish bone was extracted and perforation closed in two layers after refreshing edges. Locally, peritoneal lavage & drainage was done. Post operative recovery was uneventful. He was discharged on 12th day. On enquiring about history of fish bone ingestion after operation, apparently patient was habitual consumer of fish as he belonged to West Bengal and had unknowingly swallowed it 1 day prior to commencement of symptom.

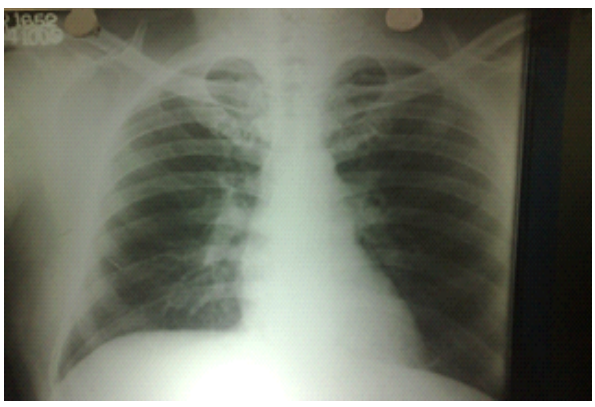
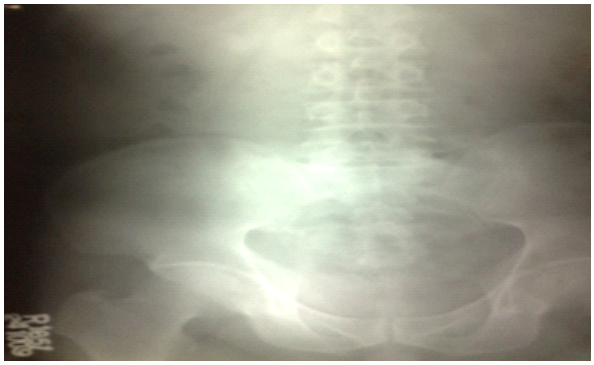
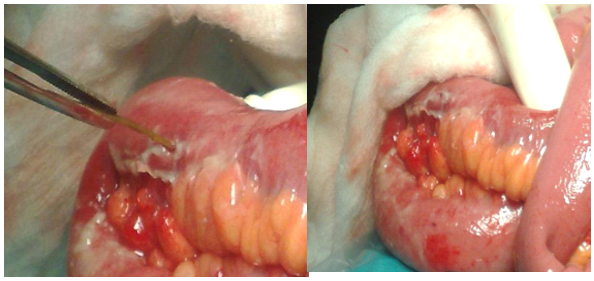


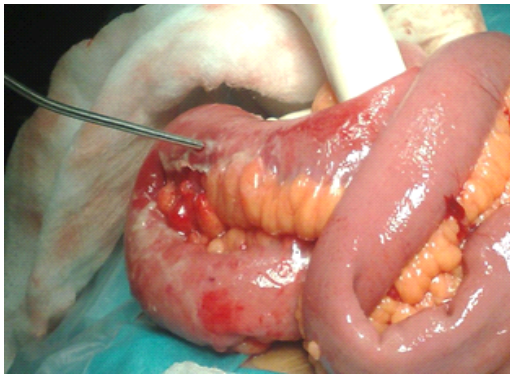
fig 1) XRAY CHEST – NO GAS UNDER DIAPHRAGM



(Fig 2) – NO RADIO OPAQUE FB IN RIF



(fig 3) –FISH BONE CAUSING TERMINAL ILEUM PERFORATION



(Fig 4) – PERFORATION DEMONSTRATED BY PROBE, MINIMAL CONTAMINATION

Discussion – Foreign body ingestion is a common clinical problem presenting in emergency department. The type of foreign body ingested depends on dietary habits of relevant regions of the country. Most of them pass through gastrointestinal tract within a period of seven days. It is estimated that 10 to 20% of ingested foreign bodies would fail to pass through entire gastrointestinal tract and less then 1% cause perforation & penetration[1].

Fish bones are amongst the commonest of foreign bodies in the upper aero digestive tract. It can have acute presentation of fish bone impaction where as sub acute or chronic presentation is invariable like perforation, retropharyngeal abscess, pulmonary complications or pseudo aneurysm formation[2]. Perforation may occur at any level of gastrointestinal tract like perforation of oesophagus, stomach, duodenum, small bowel specially ileum with injuries to mesenteric vessels resulting in massive bleeding[3]. These fish bone if left untreated may trans migrate and cause damage to intervening structures. Other common foreign bodies are dentures, chicken bones and tooth pick [4].

Perforation of gastrointestinal tract is well recognized complication of foreign body ingestion and the ileo ceacal or recto sigmoid regions are the most common location of perforation due to change in direction of intestinal transit between mobile portion of the mesocolon (ileum & sigmoid) and a more or less fixed portion of retroperitoneum (caecum & rectum)[1].Preoperative diagnosis is usually difficult because ingestion is usually accidental. Ando reported sites of perforation or penetration in descending order frequency, anus 31.3%, ileum 9.6%, transverse colon 8.8%, sigmoid colon 6.3%, oesophagus 5.8%, rectum 3.3%caecum 2.5%, descending colon 2.1%. In this series, the clinical presentations were intra abdominal abscess or granuloma. 5.8%operations were performed in 99.1% of all the patients. However, preoperative diagnosis was difficult. They were often mistakenly diagnosed as malignant tumor 15.9%, inflammatory tumor 13.2%, and appendicitis 11.9%. The preoperative diagnosis was accurate in only 4.6% of these cases.[5] The etiological pattern of ingestion of foreign body is varied. Carelessness particularly in children, poor vision, mental infirmity, rapid eating, drug addiction, absent mindedness and use of dentures predisposes to this entity[6]. In our case, patient lacked cognition of fish bone ingestion , swallowed accidentally [7] as he was habitual consumer of fish and an accurate preoperative diagnosis was not possible. Fish bone is usually radiolucent , not detected in radiograph.

We emphasize that in all pain abdomen cases, detailed history with respect to meals should be taken. Computerized tomography might be of help in diagnostic dilemma, it could have detected extra luminal air near terminal ileum[8,10]. But in our case, clinically acute appendicitis was the provisional diagnosis. Of course right iliac fossa pain remains a dilemma, debate and controversy.

Management of acute abdominal pain still remains a clinical discipline, although portfolio of investigations appears to be expanding like ultrasonography, computed tomography and diagnostic laparoscopy. These have to be evaluated in the light of full clinical picture, acute appendicitis and diverticulitis should be considered in differential diagnosis[9]. Management of acute abdominal pain is an ongoing challenge. It highlights the importance of eliciting a full history of eating habits in those presenting with abdominal pain.

Conflict of interest – the authors declare that they have no competing or disclosable interest.

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