Perforation of ileum by an ingested fish bone: An uncommon cause of peritonitis
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Introduction
Over 100,000 cases of foreign body ingestion are reported in North America annually. Vast majority of symptomatic patient present with symptoms related to foreign body lodging in the upper aero-digestive tract. 75% of ingested foreign bodies have been reported to be impacted at the cricopharyngeal sphincter of the esophagus, and > 90% of foreign bodies pass through the intestine if they reach the stomach. Manifestations of complications including bowel perforation, concealed abscess or bleeding are infrequently reported. These conditions necessitate prompt diagnosis and surgical intervention.

Objectives
To present a rare case of peritonitis and to review the current literature

Methodology
A case of bowel perforation caused by a fish bone is presented and relevant cases were reviewed through a search in Pubmed and Medline

Result
Case: A 51 years old lady with unremarkable past health presented to Accident and Emergency Department complaining of acute onset abdominal pain for three days, and was admitted to Surgical unit. On admission, she was found to have fever of 39 degrees Celsius. Upon physical examination, tenderness, guarding and an abdominal mass was detected over right side of abdomen. Subsequent urgent CT scan with contrast showed evidence of perforated bowel with a 3.6cm linear hyperdense filling defect extending from the lumen of the ileum, across the medial distal ileal wall and into the mesentry. Emergency laparotomy was performed and identified a perforation site on the ileum, pierced by a 3.5 cm fish bone on mesenteric side encased by a concealed abscess cavity with pus. The fish bone was removed and primary closure of small bowel defect was fashioned with single layer absorbable sutures. Patient's recovery was uneventful and was discharged one week post-operation.

Discussion: Ingested foreign body leading to perforation is commonly sharp objects such as fish bone or toothpicks. High risk groups including children, elderly and denture users. The most common site of perforation is terminal ileum, accounting for 39% of the cases.
Surgery is indicated for definitive treatment of foreign body ingestion complicated with bowel perforation. The treatment of choice is circumstantial, decisions on primary repair or resection of bowel is dependent on size of perforation, bowel and peritoneal conditions. General consensus for treatment of perforations less than 1cm with minimal surrounding inflammation is primary repair. Most surgeons would opt for enterectomy otherwise.

Conclusion: Perforation due to foreign body ingestion is an uncommon disease entity. Their clinical presentations can mimic other diseases. Early recognition is crucial to guide further management, especially if history is suggestive, as failure in removal of foreign body may lead to chronic inflammatory sequelae in body cavity.