

An Interesting and Rare Presentation of Small Bowel Perforation- A Case Study with Review of Literature

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Abstract: *Accidental Fish bone ingestion is relatively common, however, resultant perforation of the small bowel is fortunately very rare. We present a case of a 33 year - old mentally challenging gentleman who got admitted complaining of severe abdominal pain since 3days, vomiting for 2days, and abdominal distension for 2 days. A diagnosis of small bowel fish bone perforation was made intra-operatively and the patient subsequently made a full recovery without the need for bowel resection. We present this as a rare case of small bowel fish bone perforation by a fish bone where the site of perforation was closed and treated successfully without the need for bowel resection.*

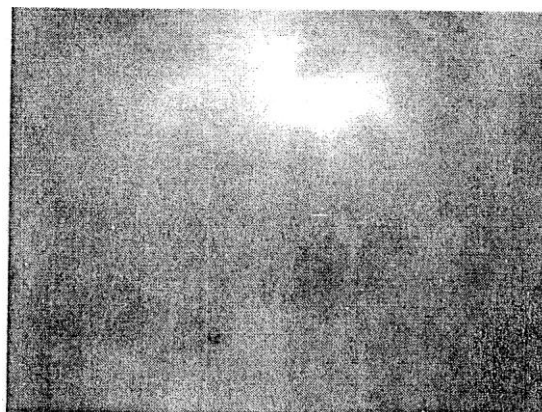
Keywords: *Fishbone; Perforation;*

I. Introduction

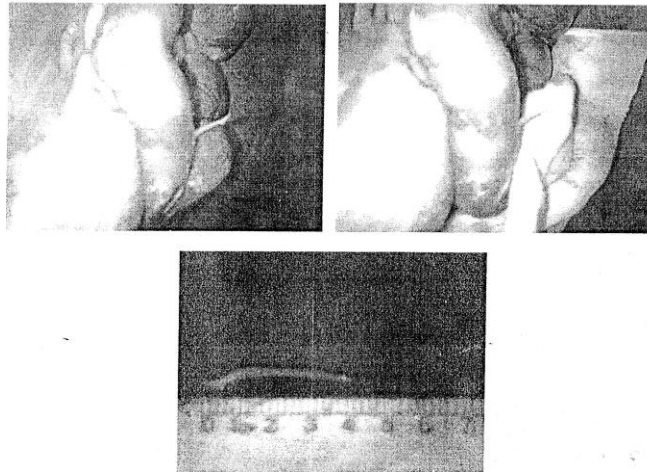
Foreign-body ingestion is a common clinical problem presenting in emergency department, perforation of the gastrointestinal tract by ingested foreign bodies is uncommon and less than 1% of ingested foreign bodies perforate the bowel. Clinically, patients often do not recall ingesting the foreign body, which makes the clinical diagnosis more challenging, and a correct diagnosis is frequently delayed. In our case, the pre-operative diagnosis of fish bone ingestion was definitely not possible because our patient was of low intelligent quotient and was uncared.

II. Case Study

A 33 year - old mentally challenging man without relevant pre - medical history presented with a history of pain abdomen since 3 days, vomiting and distension of abdomen since 2 days. At admission, he had stable vital signs and there was no abdominal guarding and rigidity with presence of bowel sounds. His complete haemogram, blood sugar, renal function tests and ECG were within normal limits. His X-Ray chest PA view revealed no air under diaphragm. Plain X-ray abdomen erect shows dilated bowel loops. He was therefore scheduled for emergency laparotomy after anesthetic assessment and obtaining informed consent for surgery.



Laparotomy revealed adherent omentum to loops of ileum. The omentum when gently separated from ileal loops showed a foreign body [a fish bone] of about 4cms in the distal ileum 60 cms proximal to ileal-caecal junction and the above fish bone was seen perforating the above site. There was no leak & perforation was concealed and bowel was found to be healthy and vascular and henceforth resection was not planned. The perforation site was closed with 2-0 vicryl.



Post-operative period was uneventful.

III. Discussion

Most foreign-body ingestion is accidental, but there may be contributory factors such as mental disorder, bulimia, alcoholism, and prison incarceration. When foreign bodies are ingested, they usually pass spontaneously through the entire alimentary tract and out in the feces.[2] Perforation of the gastrointestinal tract is a well-recognized complication of foreign-body ingestion and the ileum is the most common site of perforation[1].

We report the case of a fish bone perforating the distal ileum. In our case, the erect plain abdominal radiograph demonstrated the presence of distended small bowel loops & no signs of pneumoperitoneum but no evidence of a radio opaque foreign body. This finding is not surprising because fish bones have variable radio opacity depending on the fish species; In general, they are minimally radio opaque and can rarely be detected on plain films, especially if they are masked by coexistent inflammatory tissue, fluid or abscesses (3). These foreign bodies may lodge anywhere in the gastrointestinal tract, from the level of the esophagus to the rectum. Retrieval of a foreign body that has lodged in the stomach using a flexible overtube has been reported[4]. Ten to twenty percent of objects must be removed endoscopically, and about 1% requires surgery [5]. In conclusion, this case report highlights the fact that intestinal perforation caused by an ingested foreign body is a challenging diagnosis that should always be suspected in cases of acute abdomen.

IV. Conclusion

This case-study is presented for

- It's rarity
- For awareness of fish bone as a cause of small bowel perforation in pre-operative evaluation, particularly in mentally challenged persons and
- To advise early surgical intervention for better prognosis.

References

- [1]. Small-bowel perforation caused by fish bone; Sheng-Der Hsu, De-Chuan Chan, Yao-Chi Liu; World J Gastroenterol 2005;11(12):1884-1885;www.wjgnet.com World Journal of Gastroenterology ISSN 1007-9327;The WJG Press and Elsevier.
- [2]. Pinero MA, Fernandez Hernandez JA, Carrasco PM, Riquelme RJ, Parrilla PP. Intestinal perforation by foreign bodies. Eur J Surg 2000; 166: 307-309.
- [3]. Ell SR, Sprigg A. The radio-opacity of fishbone ;species variation. Clin Radio! 1991; 44:104-107
- [4]. Chang JJ, Yen CL. Endoscopic retrieval of multiple fragmented gastric bamboo chopsticks by using a flexible overtube. World J Gastroenterol 2004; 10: 769-770.
- [5]. Webb WA. Management of foreign bodies of the upper gastrointestinal tract. Gastroenterology 1988; 94: 204-216.