Fishing: Pleasure or Pain?

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Citation

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Abstract

Fishing is a common sport. Penetrating injuries of extremities due to fishing are common and have been widely reported. Ingestion of fish hooks is very rare. Ingestion of foreign bodies although infrequently seen in clinical practice, controversies remain with regards to conservative, endoscopic or surgical management. We report a case of accidental ingestion of 3 fish hooks, managed surgically after a failed trial of conservative management.

CASE

Fishing is a common recreational sport. Penetrating injuries of extremities due to fishing are very common and have been widely reported. Ingestion of fish hooks is very rare and there are no instances of this being reported in humans. We report a case of accidental ingestion of 3 fish hooks, managed surgically after a failed trial of conservation.

A 48 year -old gentleman was seen in the Emergency department after accidentally ingesting three fish hooks. Clinical examination was unremarkable. Preliminary abdominal film confirmed the presence of three fish hooks in the stomach.

He was admitted for observation. During his stay in the ward he was fed normally. 24 hours later a repeat abdominal film confirmed progression of 2 hooks to mid smallbowel but one hook remaining in the stomach. At 32 hours postingestion he had a sudden onset of severe abdominal pain, with features suggestive of peritonitis. He underwent emergency laparotomy which confirmed the presence of two fish hooks in the midileum which were removed by enterotomy. With the nylon connecting the hooks as a guide, the third hook was traced to the stomach. A gastrotomy was performed and the third hook along with the nylon wire was removed. The third hook was stuck to the greater curve of the stomach avulsing an area of gastric mucosa, arresting it's spontaneous passage. It is very likely that the acute onset of pain was related to the avulsion of gastric mucosa. Post operatively he made an unremarkable recovery.

Figure 1

Figure 2

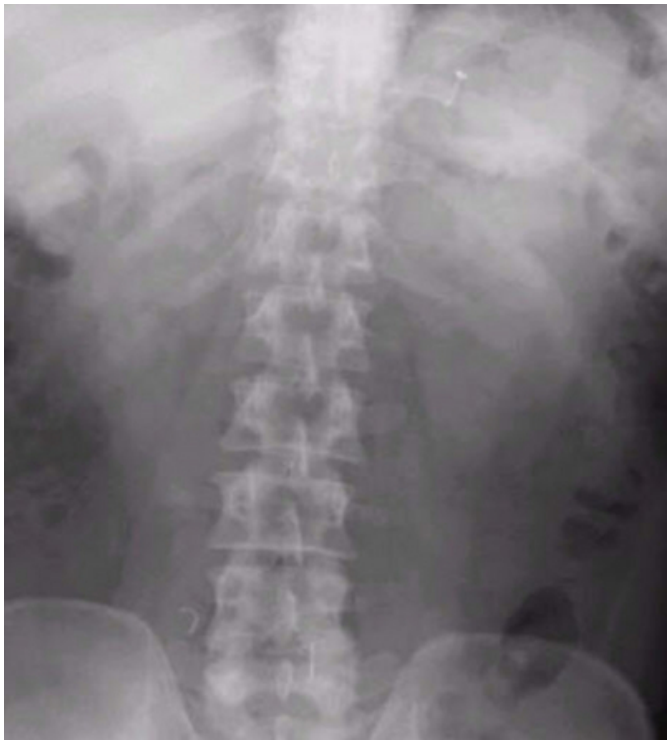
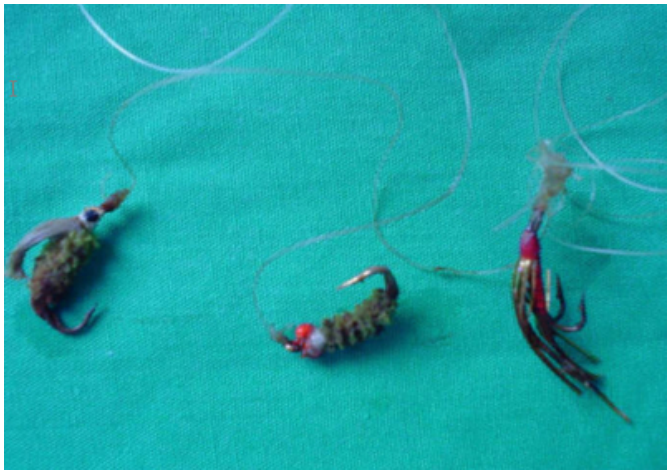


Figure 3



DISCUSSION

Fishing is a sport enjoyed across the world by millions. Fishing related penetrating injuries are common to extremeties due to the mechanical nature of barbed hooks, and care should be exercised in the treatment of these injuries. There are many reports in the literature on treatment of ingested foreign bodies, but no reports of fish hook ingestion. Management of fish hook ingestion poses a peculiar problem because of the barbed nature of the hook. In view of it's design simple extraction by pulling is not practical because of inflicting potential damage. Most ingested foreign bodies pass spontaneously along the entire alimentary canal without inflicting major damage[1]. Risk of perforation is higher when sharp or pointed metallic objects are ingested. 10-20% require non-operative intervention and less than 1 percent require surgical intervention[2]. Deaths due to foreign body ingestion are very rare and mortality rates even in large series have been low [2,6]. Guidelines from the American Society for Gastrointestinal Endoscopy for ingested sharp objects suggest endoscopic retrieval if foreign body is in stomach and proximal duodenum. Otherwise they need to be followed by daily radiographs documenting their safe passage [2]. Surgical intervention should be considered for failed passage for three consecutive days [3,4] or on clinical grounds. The risk of complication from a sharp object can be as high as 35%[7]. Endoscopic retrieval may be accomplished safely if sharp objects are in stomach and proximal duodenum, if facilities and expertise exist. Some advocate initial endoscopy for all patients with foreign body ingestion, inspite of recognised failure to extract the foreing body safely in 48% [5]. There is no reported instance of endoscopic extraction of fish hooks from the stomach and proximal duodenum.

In our patient, an initial trial of conservation failed on clinical grounds at 32 hours post ingestion. This was due to the nature of the foreign body, 3 fish hooks being connected by a nylon line. The proximal hook impacted in the gastric mucosa arresting the passage of the two remaining hooks downstream by peristalsis as the full length of line unwound. Indeed the peristaltic drag probably initiated the impaction of the proximal hook and led to the partial avulsion of an area of gastric mucosa. Operative intervention then became necessary.

KEY POINTS

1. Ingestion of foreign bodies are frequently encountered in clinical practice, especially common in children and prison inmates
2. Most ingested foreign bodies, regardless of size and shape are managed conservatively
3. New Endoscopic techniques and expertise are helpful in removing majority of ingested foreign bodies from stomach and proximal duodenum
4. Surgery is indicated only if conservative treatment fails or for complications

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