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# Ingested Fish Bone, Unusual Cause of Perianal Sepsis A Case Report

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Perianal abscess and fistula are a cause of significant morbidity worldwide and have been documented since the time of Hippocrates (460 BC). Anorectal sepsis accounts 0.5 - 1 % of all surgical admissions and constitutes 20-25 % of those for colorectal disorders.

Except for unusual diseases, fistula in ano originates from infection in the anal crypts of Morgagni, forming an abscess which, when it opens, results in a tract leading to the skin surface. This brief report presents a case of fistula-in-ano with unusual aetiology that not reported in literature.

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Anorectal abscesses and fistulas are seen commonly in the primary care practice. An abscess forms as a result of obstruction of an anal gland, with resulting retrograde infection. Anal fistula simply represents the chronic phase of perianal abscess. The history is usually diagnostic and special studies usually are not required<sup>1</sup>.

### THE CASE

A fifty year-old male presented to the local health center with history of sudden sever anal pain during defecation which was described as sharp as "insect bite". This was diagnosed as acute anal fissure and treated as such. Despite treatment the patient continued to have anal discharge which developed into throbbing pain which increased during sitting and coughing. Subsequenly, Perianal swelling developed followed by blood and pus discharge. A week later, he presented to the surgical clinic with main complaint of perianal swelling and blood discharge.

Patient gave no significant past history and his systemic examination was normal. Local examination was suggestive of (perianal abscess with fistula formation). He was scheduled for examination under anaesthesia and anal fistulectomy.

Peroperatively a foreign body (fish bone) was seen inside the perianal abscess cavity (Fig 1), and a small opening connecting to the anal canal could be identified. We treated the case as an anal fistula and fistuolotomy performed.

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Figure 1. Fish bone extracted from the patient

Postoperatively, we asked the patient about history of incidental fish bone ingestion. He was able to recall an incidence when he propably ingested a fish bone and this was before his presentation.

Postoperative course was straight forward and in subsequent visits to the clinic he had improved without complications.

#### DISCUSSION

Perianal abscess and fistula are fundamentally the same condition, the abscess being the acute phase and the fistula is the chronic phase. More than 90% of perianal abscesses are due to cryptoglandular infection.

Associated diseases can predispose to anorectal sepsis. Cronh's disease (16 -20 % have anorectal complication), ulcerative colitis (15%), pulmonary TB, actinomycosis, lymphogranuloma venereum and rectal cancer<sup>2</sup>. The incidence of fistula-in-ano following anorectal abscesses was 26 % in the acute phase or as a sequelae<sup>3</sup>.

The symptom of perianal abscess is in the form of a throbbing pain in the perianal region which is worse on sitting and coughing<sup>4</sup>.

Fish bones are sharp objects and they can get lodged in the aerodigestive tract and cause complications, although this is rare-about 1% to 3% percent. but the associated complications are potentially catastrophic, including cervical abscess, mediastinitis, esophago-carotid fistula, lung abscess if it gets into the airway and perforated bowel as it passes through the intestinal tract.

The most common site for fish bone impaction is the esophagus and it comprises 60% of esophageal foreign bodies<sup>5</sup>. Plain x-ray films have 25 % sensitivity and 86 % specificity therefore, not a useful diagnostic investigation for fish bone impaction in the oesophagus<sup>6</sup>.

In another study from Japan, plain films missed about 56 % of fish bone impactions, whereas CT scan demonstrated the bones in all cases<sup>7</sup>. PD Maldjian in 1999, reported two cases of small bowel perforation secondary to ingested fish bones. In one of these, the findings from computed tomography lead to the correct diagnosis preoperatively<sup>8</sup>.

In our case, a fish bone ingested by the patient was impacted in the anal canal. The force exerted by the anal sphincter during defecation or probably by the evacuated fecal matter resulted in this sharp object being pushed through the anal wall with its pointed end leading into the perianal tissue. Subsequently, infection resulted in abscess and fistula formation.

A review of the literature revealed that fish bones are not reported to perforate the large intestine or the anal canal and not known to cause perianal sepsis. Therefore, it is unusual for a sharp fish bone in the gastrointestinal tract to penetrate the anal canal wall with its strong musculature and to cause perianal suppuration.

## **CONCLUSION**

There are many causes of perianal sepsis, accidental fish bone ingestion is not one of them. This is an unusual case to be reported to highlight this rare cause.

#### REFRENCES

- 1. Hyman N. Anorectal abscess and fistula. Prim Care 1999;26:69-80.
- 2. Chris M, Paul F. Anorectal sepsis, abscess and fistula. J Surgery (Quarter edition)

1998;41: 69-72.

- 3. Henrichsen S, Christiansen J. Incidence of fistula-in-ano complicating anorectal
  - sepsis: a prospective study. Br J Surg 1968;7:371-2.
- 4. Lloyd-Jones W, Giles GR. The colon, rectum and anal canal. In: Cuschieri A, ed. Essential Surgical Practice.3<sup>rd</sup> edn. 1995:617.
- 5. Herranz-Gonzalez J, Martenz-Vidal J, Garcia-Sarandeses A, et al. Esophageal foreign body in adults. Otolaryngol Head Neck Surg 1991;105: 649-53.
  - 6. Ell SR. Radio-opacity of fish bones. J Laryngol Otol 1989;103:1224-6.
- Watanbe K, Kikuchi T, Katori Y, et al. The usefulness of computed tomography in the diagnosis of impacted fish bones in the oesophagus. J Laryngol Otol 1998;112:360-4.
- 8. Maldjian PD. Case Report: perforation of the small bowel from fish bone ingestion: CT findings. J Emergency Radiology 1999;6:361-3.