Fish bone perforation of small intestine

A 45-year-old man presented to the emergency department with a 3-day history of abdominal pain. He reported no nausea, vomiting or diarrhea. On examination, the patient was febrile (38.5°C) and the abdomen was diffusely tender with muscle guarding. Laboratory results showed leukocytosis (36,000 per cubic millimeter). Plain abdominal radiography was unrevealing. Computed tomography (CT) scan of the abdomen disclosed mesenteric fatty infiltration in the vicinity of a short segment of focally thickened small bowel (Figure 1A, open arrow), and a 3-cm linear radiopaque structure penetrating the bowel wall (Figure 1B, arrow), which was suspected to be a fish bone. Exploratory laparotomy was performed consequently and demonstrated the offending fish bone (Figure 1C, arrowhead) and the
congested distal jejunum coated with fibrinous exudate. The patient’s condition rapidly improved after this surgical procedure with removal of the fish bone and repair of the affected bowel loop. The post-operative recovery was uneventful.

Fish bones are commonly ingested foreign bodies but rarely present with gastrointestinal (GI) perforation as a complication. Making a correct pre-operative diagnosis of fish bone-related GI perforation is challenging for a variety of reasons. Fish bones are generally difficult to define on radiographs due to the varied degree of radiopacity and are frequently obscured by soft tissue mass, free air or fluid. On the contrary, CT scan has been postulated to be effective in accurate detection of fish bone perforation. Prompt diagnosis with CT imaging, which relies on a high index of clinical suspicion, and optimal therapeutic intervention are essential to prevent complications and improve the outcome.

References