

# THE BONE THAT ALMOST MADE IT: SIGMOID PERFORATION FROM INGESTED FISH/CHICKEN BONE

Olivia Fukui<sup>1</sup>, Bigyan Mainali<sup>1</sup>, Michael Hood<sup>2</sup>, Gregory R. Stettler<sup>1</sup>, Andrew M. Nunn<sup>1</sup>, Thomas Sullivan<sup>2</sup>, J. Jason Hoth<sup>1</sup>  
<sup>1</sup>Department of Surgery Atrium Health Wake Forest Baptist; <sup>2</sup>Department of Radiology Atrium Health Wake Forest Baptist

## Introduction

Ingestion of foreign objects is relatively common in children but less so in adults. Adult inadvertent ingestion of foreign objects such as fish or chicken bones most often presents with perforation of the oropharynx or esophagus with perforations in the lower GI tract less likely. Herein, we present a case of a multiloculated abscess in a young female secondary to sigmoid perforation from fish or chicken bone ingestion.

## Case Discussion

- 30 yo female with history of Meckel's diverticulectomy seven months prior, presented to the Emergency Department with a 4-day history of acute onset abdominal and pelvic pain
- Exam: lower abdominal and suprapubic tenderness.
- Vital signs: tachycardic to 114
- Laboratory: unremarkable.
- Imaging: CT of the abdomen and pelvis demonstrated a peripherally enhancing, lobular fluid density structure anterior to the uterus measuring up to 5.9 cm in greatest dimension associated. A curvilinear bone density structure of indeterminate origin was located peripherally within the collection. Imaging features were most consistent with an abscess.



CT with contrast demonstrating curvilinear bone density structure



Operative photo of object found within abscess cavity

## Case Discussion continued

- Course: Interventional radiology (IR) placed a drain in the collection with removal of 100 cc of purulent fluid. During the procedure a curvilinear echogenicity correlated with the finding on CT and the differential for an ingested bone with bowel perforation was raised.
- Given concern for foreign object associated with ongoing infection and potential for retained surgical material given Meckel's diverticulectomy a few months prior, we proceeded with abdominal exploration. Lower midline laparotomy revealed non-bilious ascitic fluid and several pockets of purulence in the left lower quadrant. The previously placed IR drain was in one of the cavities next to which a 3 cm foreign object with the appearance of animal bone was identified and removed. This abscess cavity was immediately adjacent to the mid/distal sigmoid colon. No obvious bowel perforation was identified. A surgical drain was placed.
- The patient did well after surgery, her drain was removed and was discharged on postoperative day 3.

## Discussion

The most common sites of perforation after bone ingestion are the oropharynx and esophagus. In the lower GI tract, the most common sites are the ileocecal valve or rectosigmoid junction. Ingestion of bones often leads to a diagnostic dilemma as the physical findings are often subtle and they may not be sufficiently visualized on imaging.