

고의로 섭취한 커터칼날의 내시경 및 보존적 치료 증례 보고

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박종민, 김성엽, 정일용, 김우식, 신용철, 김영철, 박세혁

- Abstract -

A Case of Successful Endoscopic and Conservative Treatment for Intentional Ingestion of Sharp Foreign Bodies in the Alimentary Tract

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Food bolus impaction is the most common cause of esophageal foreign body obstruction in adults. Other causes include intentional ingestion in psychiatric patients or prison inmates. We experienced successful treatment of a patient with intentional ingestion of multiple sharp foreign bodies(25 cutter and razor fragments). A 47-year-old male patient who was suffering from chronic alcoholism was admitted, via the emergency room, with dysphagia and neck pain. He was suffering from alcoholic liver cirrhosis and psychiatric problems, such as chronic alcoholism, anxiety disorder and insomnia. The patient had intended to leave the hospital after having swallowed the sharp objects. Plain radiographs and computed tomography (CT) scan showed multiple, scattered metal fragments in the esophagus, stomach, and small bowel. We performed emergent endoscopy and successfully removed one impacted blade in the upper esophagus using by a snare with an overtube. The rest of the fragments had already passed through the pylorus, so we could not find them with endoscopy. We checked the patient with simple abdominal radiographs and careful physical examinations every day. All remaining fragments were uneventfully excreted through stool during the patient's 6 day hospital stay. Finally, we were able to confirm the presence of the objects in the stool, and radiographs were negative. The patient was discharged without complications after 14 days hospital stay and then was followed by the Department of Psychiatry .

Key Words: Foreign bodies, Gastrointestinal tract, Endoscopy, Observation

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I. Introduction

Accidental foreign body or large food bolus ingestion occurs primarily in children and in edentulous or mentally impaired elderly patients. Food bolus impaction is the most common cause of esophageal foreign body obstruction in adults. Other causes include intentional ingestion in psychiatric disorders, mental retardation, or impairment caused by alcohol, and those seeking some secondary gain from access to a medical facility.(1-4) Endoscopic intervention within 24 hours from the time of ingestion should be considered early in adults, because delaying intervention may produce more symptomatic esophageal ulcerations with odynophagia.(5) More than 80 percent of ingested foreign bodies pass without the need for intervention. However, in the setting of intentional ingestions, endoscopic intervention is required in up to 76 percent of patients, and surgical intervention is required up to 16 percent.(6,7) We experienced suc-

cessful endoscopic and conservative treatment of a patient with intentional ingestion of multiple sharp metal foreign bodies(25 fragments of cutter knife blade).

II. Case

A 47-year-old male patient who has chronic alcoholism was admitted via emergency room with dysphagia and neck pain. At that time of the transfer, he was a long-stay patient in another hospital for treating his chronic alcoholism. He was suffering from alcoholic liver cirrhosis and psychiatric problem, such as chronic alcoholism, anxiety disorder and insomnia. He swallowed sharp fragments of cutter knife blade with intent to leaving the hospital the previous day. Plain radiographs (Fig. 1A-D) and computed tomography (CT) scan (Fig. 1E-G) showed multiple, scattered metal fragments in esophagus, small bowel, and colon. We performed emergent endoscopy and successfully removed one impacted

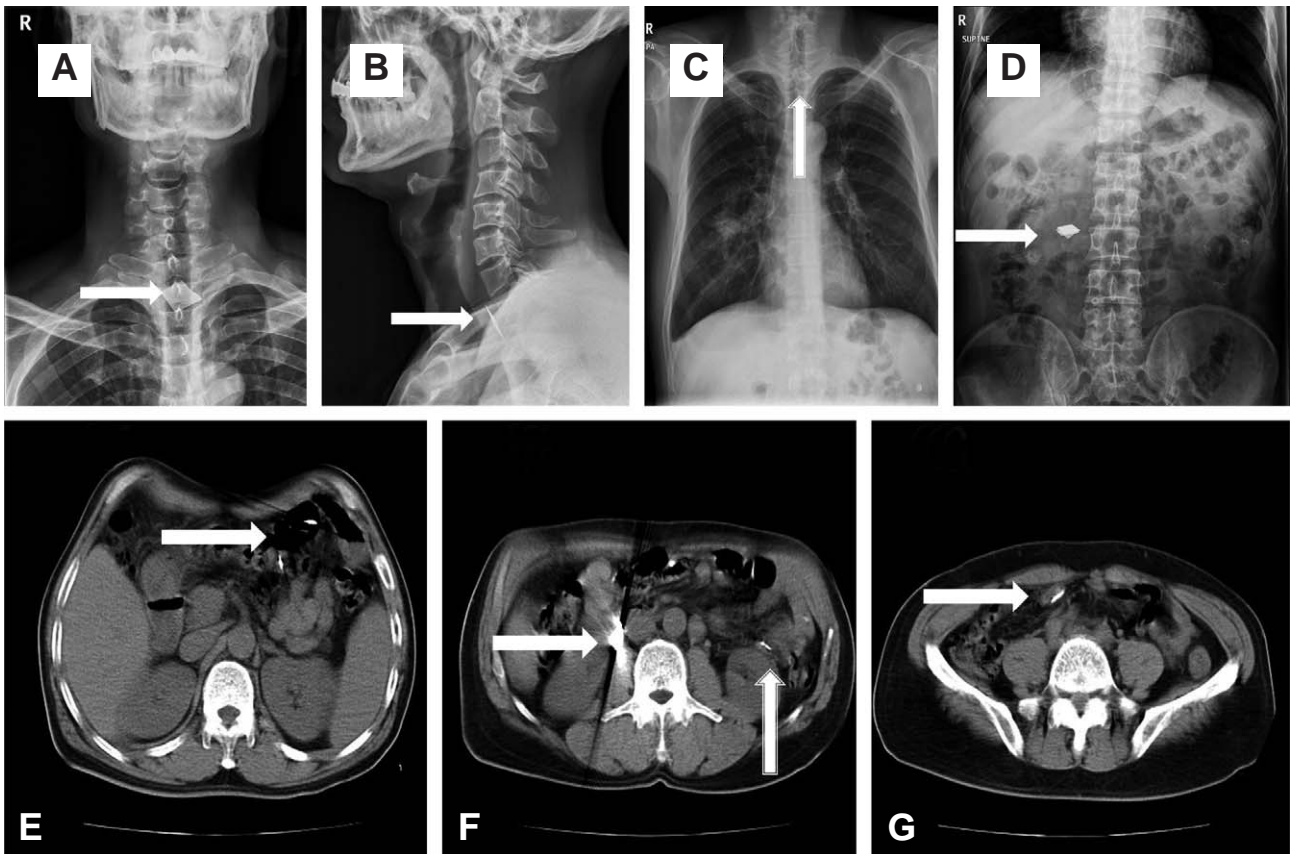


Fig. 1. Plain radiographs (A, B, C, D) show multiple fragments of cutter knife (white arrow) and also, computed tomography scans (E, F, G) show them in alimentary tract at admission.

blade in upper esophagus using snare with overtube (Fig. 2A–C). After extraction of the impacted blade, complete esophagogastroduodenostomy was performed immediately to detect any underlying disorder or complications. It showed multiple linear mucosal lacerations and ulcer without active bleeding in esophagus and stomach. (Fig. 2D, E) The rest of fragments already passed through the pylorus and we could not find them with endoscopy. We administered antiulcer drugs and checked the patient with simple abdominal radiographs and careful physical examinations every day. All remainders were uneventfully excreted through anus on 6 days of hospital stay. Finally, we were able to confirm objects in stool and negative radiographs. The patient was discharged without complications on 14 days of hospital stay and followed by department of psychiatry.

III. Discussion

Most foreign bodies that enter the stomach will pass in four to six days, and conservative management is appropriate for most blunt objects in asymptomatic patients. Even small sharp objects can pass alimentary tract without serious complications exceptions include disk batteries, magnets, objects longer than 6cm, and objects with a diameter >2.5 cm. Patients with negative radiographs who are asymptomatic can be followed expectantly. Other patients will likely require endoscopic or surgical intervention.(7,8) Even though these guidelines are consistent with our experience, the approach to management depends upon the type of object ingested, the location of the object, and the patient's clinical status. We should be well aware of appropriate selection of therapeutic modality and the timing of endoscopy at the moment.

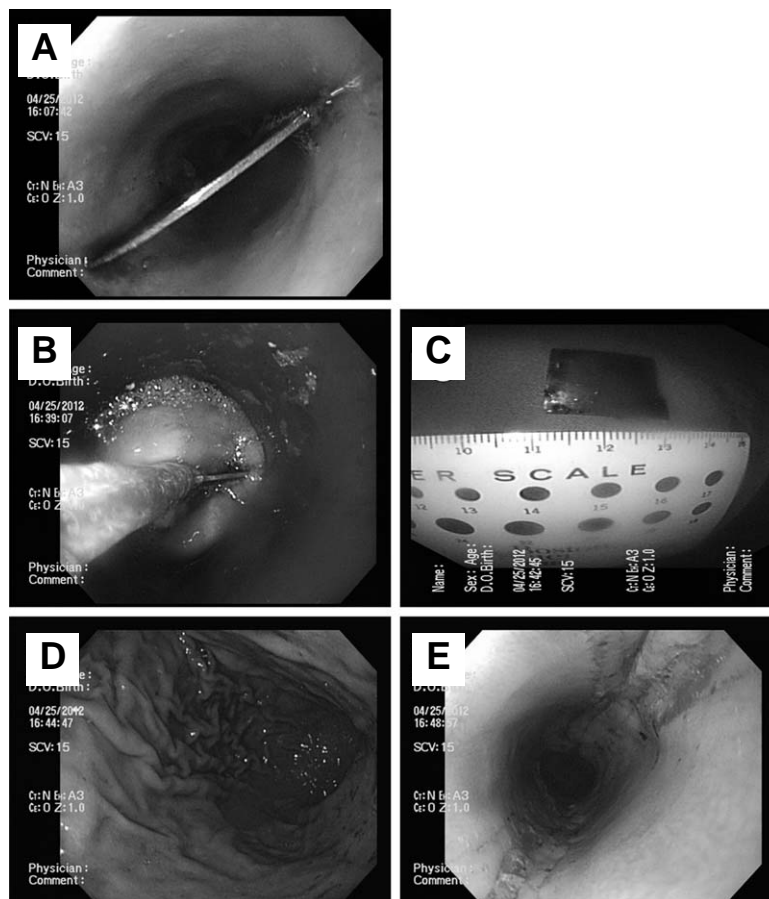


Fig. 2. A impacted fragment of cutter knife was noted on upper esophagus (A). This fragment was removed by snare with over tube (B, C). D and E view showed multiple mucosal lacerations in stomach and esophagus. The rest of fragments already passed through the pylorus.

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