Video capsule endoscopy aspiration

Busara Songtanin MD, Kenneth Iwuji MD, Andrew Shakespeare MD,
Sebastian Sanchez MD, Ebtesam Islam MD, Sameer Islam MD

An 86-year-old man with a history of hypertension, type 2 diabetes, atrial fibrillation, and coronary artery disease presented with melena for 1 week. The patient denied abdominal pain and had no history of previous gastrointestinal bleeding; he had no history of dysphagia or difficulty swallowing. Esophagogastroduodenoscopy showed normal finding, and the biopsy was negative for *Helicopter pylori*. The patient did not undergo colonoscopy due to his age and underlying comorbidities. He then underwent additional evaluation for gastrointestinal bleeding by video capsule endoscopy (VCE) with the PillCam (Medtronic; Minneapolis, MN; dimensions: length 26.2 mm, diameter 11.4 mm, weight 3.0 g). A Video Fluoroscopic Swallowing Exam (modified barium swallow) was done to evaluate his swallowing function before sending the patient for capsule endoscopy and was normal with no aspiration.

However, the patient aspirated the VCE right after he swallowed it while in the endoscopy center; he had cough but no fever, chills, nausea, vomiting, or hemoptysis.

Physical examination showed mild expiratory wheezing. Vital signs included a heart rate 60 beats per minute, respiratory rate 13 breaths per minute, oxygen saturation 100%, blood pressure 96/50 mmHg.

The video from the PillCam capsule reveals that the capsule went through epiglottis and into the left main bronchus and lodged in the left lower lung (Video). The capsule was lodged at carina for a second before entering the left main bronchus. It was successfully removed from the left lower lobe using flexible fiberoptic bronchoscopy under general anesthesia. The patient tolerated the procedure well and had no complications.

Corresponding author: **Busara Songtanin**
Contact Information: Busara.Songtanin@ttuhsc.edu
DOI: 10.12746/swrccc.v10i44.1067

Capsule endoscopy is a device that is less invasive than EGD and colonoscopy to evaluate patients for gastrointestinal bleeding, but it is a costly diagnostic tool. It is an FDA-approved for the evaluation of obscure gastrointestinal bleeding and allows visualization of inaccessible parts of the gastrointestinal tracts. Video capsule endoscopy adverse event rates are generally low. Our patient qualified for this procedure with a history of melena and negative finding of esophagogastroduodenoscopy. Common complications include retention of the capsule in the small bowel which has been reported in 1.4% of procedures and can result in small bowel obstruction. Aspiration occurs in about 0.001% of the cases. Management of VCE aspiration includes urgent removal of the capsule by bronchoscopy. Radiographic studies may not be necessary in these patients since the capsule video should demonstrate the location.

Keywords: PillCam, Video capsule aspiration, endoscopy

Article citation: Songtanin B, Iwuji K, Shakespeare A, Sanchez S, Islam E, Islam S. Video capsule endoscopy aspiration. The Southwest Respiratory and Critical Care Chronicles 2022;10(44):61
From: Department of Internal Medicine (BS, KI, SS, EI, SI), Texas Tech University Health Sciences Center, Lubbock, Texas; Department of Internal Medicine (AS), Covenant Medical Center, Lubbock, Texas
Submitted: 6/9/2022
Accepted: 6/26/2022
Conflicts of interest: none
This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.