

## Get It Out: Hydrogel Capsules Impacting in the Esophagus

Judah Kupferman, MD; Vennis  
Lourdusamy, MD; Anastasia Novikov,  
MD; Ahmed Al-Khazraji, MD; Bhanu  
Singh, MD; Raghav Bansal, MD; Joel  
Baum, MD; Joshua Aron, MD;  
Krishna Gurrarn, MD  
Icahn School of Medicine at Mount Sinai  
NYC Health + Hospitals / Elmhurst

### CONTACT

Judah Kupferman, MD, PGY-3  
Icahn School of Medicine at Mount Sinai  
NYC Health + Hospitals / Elmhurst  
Internal Medicine Residency Program  
79-01 Broadway  
Elmhurst, NY 11373  
kupfermj@nychhc.org

## CASE PRESENTATION

A 39-year-old female with eosinophilic esophagitis presented following an impaction of three cellulose/citric acid hydrogel capsules taken all at once before eating, as the instruction stated. She reported feeling the capsules stuck in her esophagus and she was unable to tolerate swallowing. She has had issues with dysphagia in the past, but these episodes typically improved with drinking water. At the time of presentation, she was not taking any medications for eosinophilic esophagitis.

Esophagogastroduodenoscopy (EGD) was performed and demonstrated gelatinized capsules within the esophagus (Figure 1) at 20 cm and extending 5 cm distally. Due to the gelatinous content, it was extremely challenging to capture the loose material to be removed. The impaction was broken down with graspers and retrieval devices, and the remaining material was pushed into the stomach. Biopsies were taken of the esophagus which demonstrated mild to moderate eosinophilic infiltration.

**Figure 1:** Gel-like content in the esophagus from cellulose/citric acid hydrogel capsules

## BACKGROUND

Hydrogel capsules are FDA-approved superabsorbent agents used for weight loss. Typically, 3 capsules are swallowed with water before eating. When in contact with water, the particles inside the capsules expand a hundredfold into an elastic gel-like structure that creates a satiated feeling in the user and promotes fullness. The capsular contents are not absorbed into the bloodstream. The most common side effects are bloating, flatulence, and abdominal pain (1-2). In this case, we discuss a patient who experienced dysphagia from hydrogel capsular impaction in the esophagus.



## DISCUSSION

For some individuals, hydrogel capsules can be useful adjuncts for weight loss. However, esophageal impaction and dysphagia can occur if not swallowed properly. To reduce this risk, users should consider swallowing each of the 3 capsules individually, followed each time by a glass of water. This method of administration will likely prevent the chance of the expansion of the capsular contents into the larger gelatinous material in the esophagus and encourage it to occur in the stomach. People with dysphagia, diverticula, and other motility disorders should be extremely careful and take these gelatinous capsules individually.

## REFERENCES

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