

Title: Capsule endoscopy retention in Zenker's diverticulum

Authors: Adriana Margarita Rey Rubiano, Eduardo José Cuello Navarro, Fernando Sierra Arango

DOI: 10.17235/reed.2022.8907/2022 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Rey Rubiano Adriana Margarita, Cuello Navarro Eduardo José, Sierra Arango Fernando. Capsule endoscopy retention in Zenker's diverticulum. Rev Esp Enferm Dig 2022. doi: 10.17235/reed.2022.8907/2022.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Capsule endoscopy retention in Zenker's diverticulum

Margarita Rey¹, Eduardo Cuello¹, Fernando Sierra¹

¹Gastroenterology, Fundación Santa Fe de Bogotá, Bogotá, D.C. Colombia.

Correspondance author:

Adriana Margarita Rey Rubiano, M.D E-mail: margaritarey1@hotmail.com Gastroenterology – Fundación Santa Fe de Bogotá Calle 119 No. 7 - 75. Telephone number: 6030303 Phone number: (57) 3123516057 Bogotá D.C., Colombia

Clinical Case:

A 75-year-old male patient, with a history of digestive bleeding of unknown origin, underwent a study of the small intestine by capsule endoscopy. In two abdominal radiographs, the capsule endoscopy was not evident nor recovered. Thus, it was assumed that the capsule was expelled. Two years later, the patient presented dysphagia and consulted. A chest tomography revealed the presence of a Zenker's diverticulum with an image suggestive of a capsule endoscopy inside. Endoscopic extraction of the capsule was performed under general anesthesia and endotracheal intubation. During the procedure, Zenker's diverticulum was observed with the capsule inside, which was extracted with a Roth basket.



Discussion

Capsule endoscopy is used to examine the small intestine, mainly in cases of occult bleeding, inflammatory bowel disease, and tumor detection.¹ The most common complication is the retention of the capsule due to intestinal stenosis, which then requires invasive procedures for capsule extraction.² The retention of the capsule at the esophageal level should be considered since the incidence of this issue increases in incomplete studies. Studies have shown that 10.1% of cases occur due to other causes, such as age (> 65), transit through the stomach (> 43 minutes), and minutes in the small intestine (> 286).³



Images A and B: CT scan of the chest showing Zenker's diverticulum with a capsule inside.





Image C: Endoscopic view of endoscopic capsule inside Zenker's diverticulum.

References

- 1. Cave, D. R., Hakimian, S., & Patel, K. (2019). Current Controversies Concerning Capsule Endoscopy. Digestive Diseases and Sciences, 64(11), 3040–3047.
- 2. Bakhshi, G., Tayade, M., Jadhav, K., Choure, D., Mane, N., & Patil, S. (2014). Retention of an endoscopic capsule. Journal of Minimal Access Surgery, 10(3), 163.
- 3. Macías, E., Elosua González, A., Juanmartiñena, J. F., Borda Martín, A., Elizalde, I., & Fernández-Urién, I. (2021). Can we predict an incomplete capsule endoscopy? results of a multivariate analysis using a logistic regression model. Revista Española De Enfermedades Digestivas. https://doi.org/10.17235/reed.2021.7320/2020.