



Case Report

Pill in the pyriform sinus, What anaesthesiologists should know about it

Deepak Ganjigere Palaksha^{1*}, Binesh Badyal², Kavita Sandhu²

¹Dept. of Neuroanaesthesia and Neurocritical Care, National Institute of Mental Health and Neurosciences, Bengaluru, Karnataka, India

²Dept. of Neuroanaesthesia and Critical Care, Max Smart Super Speciality Hospital, Saket, New Delhi, India



ARTICLE INFO

Article history:

Received 18-04-2024

Accepted 29-05-2024

Available online 10-06-2024

Keywords:

Pyriform sinus

Pill size

Fasting

ABSTRACT

In a 51-year-old male scheduled for elective surgery, a video laryngoscopy showed a foreign body near the right pyriform sinus. It was removed with Magill forceps and found to be remnants of the tablet. He had taken a tablet of Pantoprazole 2 hours prior to surgery with sips of water. In the postoperative period, he confirmed he had no difficulty in swallowing and his lower cranial nerve examination was normal. He did mention he needed more water to swallow the tablet given prior to surgery. Our departmental protocol has been allowing sips of water for tablets on the morning of surgery. The factors like size of the tablet, amount of water, and position of the head do affect the swallowing of a tablet. Following this incident now we provide clear instructions to our patients about morning oral medications.

This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprint@ipinnovative.com

1. Pill in the Pyriform sinus, What Anaesthesiologists Should know About it

A 51-year-old male, with no known comorbidities, was scheduled for elective lumbar spine surgery. He was fasting from midnight 10 P.M and took a tablet of Pantoprazole at 6 A.M with of a sip water as per department protocol. At 8 A.M. patient was induced with intravenous agents, and bag-mask ventilation was uneventful. During video laryngoscopy to our surprise, a foreign body near the right pyriform sinus was seen (Figure 1).

The foreign body was removed with Magill forceps and Endotracheal intubation was performed. After extubation, the patient confirmed he had no difficulty swallowing or foreign body sensations in the throat. However, he did feel the need for more water to swallow the tablet given in the morning. It is common to find food particles around the glottis during intubation in patients with altered sensorium.

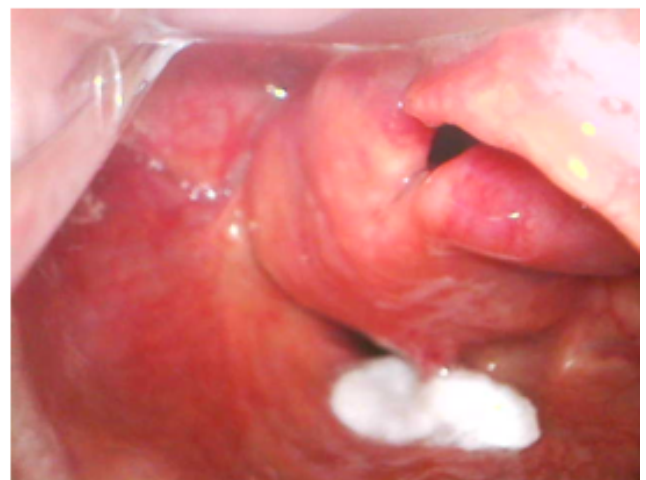


Figure 1: Screenshot of Videolaryngoscope showing tablet residue in right pyriform sinus during induction of general anesthesia.

* Corresponding author.

E-mail address: Deepuganjigere@gmail.com (D. G. Palaksha).

Here we present a rare case where a foreign body was found in a patient with normal swallowing reflex in the peri glottic area. It was noticed during laryngoscopy and was removed safely. This was probably because of the restriction of clear fluid intake prior to surgery. However, to prevent such occurrences in the future we looked into factors affecting swallowing of tablets. The quantity of water is found to be directly proportional to the ease of swallowing a tablet.¹ Tablets less than 7 mm in diameter and extension of the head while swallowing had shorter oral transit time.² Also, tablet residues are most commonly found in the vallecula, pyriform sinus, and base of the tongue.² It is important to give clear instructions to patients about medications on the morning of surgery. The smallest tablet available of the same drug is to be ordered and preferably swallowed in a sitting upright position with the head extended. The tablets should be swallowed with 100 ml of water, also allowing more water if the patient needs it. A maximum of 400 ml can be given 2 hours before scheduled surgery per the latest guidelines.³ These instructions will keep patients comfortable and prevent residues in the pharynx.

2. Source of Funding

None.

3. Conflict of Interest

None.

References

1. Hey H, Jorgensen F, Sorensen K, Hasselbalch H, Wamberg T. Oesophageal transit of six commonly used tablets and capsules. *BMJ*. 1982;285(6356):1717–26.
2. Sugiyama S, Iida T, Morimoto Y, Yamazaki Y, Mikuzuki L, Hayashi M. Effects of Tablet Size and Head Posture on Drug Swallowing: A Preliminary Examination Using Endoscopy in Healthy Subjects. *Acta Med Okayama*. 2021;75(4):495–503.
3. Joshi GP, Abdelmalak BB, Weigel WA, Harbell MW, Kuo CI, Soriano SG. American Society of Anesthesiologists Practice Guidelines for Preoperative Fasting: Carbohydrate-containing Clear Liquids with or without Protein, Chewing Gum, and Pediatric Fasting Duration-A Modular Update of the 2017 American Society of Anesthesiologists Practice Guidelines for Preoperative Fasting. *Anesthesiology*. 2023;138(2):132–51.

Author biography

Deepak Ganjigere Palaksha, Assistant Professor
 <https://orcid.org/0000-0003-3795-8469>

Binesh Badyal, Senior Consultant

Kavita Sandhu, Senior Director

Cite this article: Palaksha DG, Badyal B, Sandhu K. Pill in the pyriform sinus, What anaesthesiologists should know about it. *Southeast Asian J Health Prof* 2024;7(2):53-54.