E-Videos

The "squeezing with forceps" method for emergency endoscopic removal of an impacted pancreatic stone in the papilla of a patient on antithrombotic therapy





► Fig.1 Coronal image of contrast-enhanced computed tomography showing the pancreatic stone 14 mm in size impacted in the papilla.

Endoscopic pancreatic sphincterotomy or needle-knife precut sphincterotomy is an essential procedure when removing a large impacted pancreatic stone in the papilla [1–3]. However, sometimes it is not feasible to perform such procedures, especially in emergency settings in patients receiving antithrombotic therapy. Herein, we report an alternative method that can be used for emergency endoscopic removal of an impacted pancreatic stone in the papilla of patients undergoing antithrombotic therapy.

An 88-year-old woman was referred to our hospital due to obstructive jaundice with acute cholangitis and pancreatitis that was caused by a pancreatic stone 14mm in size impacted in the papilla (**Fig.1**). She was on antithrombotic therapy following strokes due to atrial fibrillation. The antithrombotic therapy could not be discontinued but she required emergency endoscopic retrograde cholangiopancreatography (ERCP) for her serious condition. We performed emergency ERCP with biliary and pancreatic drainage; however, the attempt failed because a guidewire could not pass the impacted stone in the papilla



▶ Fig. 2 Endoscopic images of the pancreatic stone. **a** The impacted pancreatic stone in the papilla. **b** The papilla was pushed with the opened jaws of rotatable grasping forceps to squeeze out the stone. **c** The "squeezing with forceps" method enabled the stone to be grasped with the forceps. **d** The large pancreatic stone was successfully removed without endoscopic pancreatic sphincterotomy or needle-knife precut sphincterotomy.

(**Fig.2a**). Therefore, we used an alternative method, which we have called "squeezing with forceps" method, that uses rotatable grasping forceps (FG-44NR-1; Olympus Medical Systems, Tokyo, Japan). We pushed the papilla with the opened jaws of the grasping forceps as if squeezing out a blackhead (**Fig.2b**). Then, we grasped the popped-out pancreatic stone with the forceps, and successfully extracted the impacted stone without any complications (**Fig.2c,d, Video 1**).

Unlike elective ERCP, the use of antithrombotic agents cannot be discontinued in emergency ERCP. The "squeezing with forceps" method allowed safe extraction of an impacted pancreatic stone in the papilla of a patient on antithrombotic therapy. This approach is feasible, especially in the situation where biliary and/or pancreatic drainage is impossible due to the impacted stone.

Endoscopy_UCTN_Code_TTT_1AR_2AI



Video 1 The "squeezing with forceps" method for emergency endoscopic removal of an impacted pancreatic stone in the papilla of a patient receiving antithrombotic therapy.

Competing interests

The authors declare that they have no conflict of interest.

The authors

Sho Kitagawa 🭳 Shori Ishikawa, Keiya Okamura

Department of Gastroenterology, Sapporo Kosei General Hospital, Sapporo, Japan

Corresponding author

Sho Kitagawa, MD

Department of Gastroenterology, Sapporo Kosei General Hospital, Kita 3 Higashi 8, Chuo-ku, Sapporo 060-0033, Japan bossa0405@yahoo.co.jp

References

- Naitoh I, Nakazawa T, Ohara H et al. A case of obstructive jaundice caused by impaction of a pancreatic stone in the papilla for which a needle knife precut papillotomy was effective. JOP 2008; 9: 520–525
- [2] Yoo KH, Kwon CI, Yoon SW et al. An impacted pancreatic stone in the papilla induced acute obstructive cholangitis in a patient with chronic pancreatitis. Clin Endosc 2012; 45: 99–102
- [3] Shetty AJ, Pai CG, Shetty S et al. Pancreatic calculus causing biliary obstruction: endoscopic therapy for a rare initial presentation of chronic pancreatitis. Dig Dis Sci 2015; 60: 2840–2843

Bibliography

Endoscopy 2023; 55: E454–E455 DOI 10.1055/a-2015-3100 ISSN 0013-726X © 2023. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (https:// creativecommons.org/licenses/by-nc-nd/4.0/) Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany



ENDOSCOPY E-VIDEOS https://eref.thieme.de/e-videos



Endoscopy E-Videos is an open access online section, reporting on interesting cases

and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online. Processing charges apply, discounts and wavers acc. to HINARI are available.

This section has its own submission website at

https://mc.manuscriptcentral.com/e-videos