

## Title:

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Authors:

Enrique Pérez-Cuadrado Robles, Paul Kisoka, Benjamin Alexandre, Pierre H. Deprez

DOI: 10.17235/reed.2019.6264/2019 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Pérez-Cuadrado Robles Enrique, Kisoka Paul, Alexandre Benjamin, Deprez Pierre H.. A tricky pancreatic stone face to an expanding endoscopic armamentarium: we can lose a battle but not the war . Rev Esp Enferm Dig 2019. doi: 10.17235/reed.2019.6264/2019.



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**IPD 6264** 

A tricky pancreatic stone face to an expanding endoscopic armamentarium: we can

lose a battle but not the war

Enrique Pérez-Cuadrado-Robles<sup>1</sup>, Paul Kisoka<sup>2</sup>, Benjamin Alexandre<sup>3</sup> and Pierre H.

Deprez1

<sup>1</sup>Department of Gastroenterology. Cliniques Universitaires Saint-Luc. Brussels, Belgium.

<sup>2</sup>Department of Gastroenterology. Grand Hôpital de Charleroi. Charleroi, Belgium. <sup>3</sup>

Department of Internal Medicine and Hepato-Gastroenterology Unit. Notre-Dame de

Grâce Hospital. Gosselies, Belgium

**Correspondence**: Enrique Pérez-Cuadrado Robles

e-mail: kikemurcia@gmail.com

Key words: Pancreatic stone. Pancreatoscopy. Lithotripsy. Single-operator

cholangioscopy.

CASE REPORT

A 43-year-old female with hereditary chronic pancreatitis presented with increasing

pancreatic pain and multiple pancreatic stones, despite extracorporeal shockwave

lithotripsy and pancreatic stenting 12 months previously.

Direct lithotripsy was performed via endoscopic retrograde cholangio-

pancreatography and the stones were further evaluated. A dilated main pancreatic

duct with a short stenosis in the head of the pancreas was confirmed by fluoroscopy.

In addition, multiple large stones along the duct were observed during contrast

opacification. The stenosis was dilated using a 6 mm x 4 cm balloon (Hurricane™,

Boston Scientific, Zaventem, Belgium). Subsequently, a 4 cm lithotripsy basket (Endo-

Flex®, Voerde, Germany) was used to remove several distal stones. Unfortunately, the

basket became impacted in the stenosis due to a 2 cm hard stone. The captured stone

was partially crushed using a mechanical lithotriptor but the Dormia basket wires were



broken. Thus, the endoscope was removed and passed in parallel to the trapped basket in order to perform single-operator pancreatoscopy (SOP) using the Spyglass™ DS (Boston) (Fig. 1). SOP-guided electrohydraulic lithotripsy under a Nortech AUTOLITH™ system (Northgate Technologies, Elgin, IL, USA) was performed in a noncontact manner (Fig. 2). Three probes were required to break the stone and remove the basket. Finally, two pancreatic stents (5-7 Fr) were placed. The patient recovered well after the procedure.

## **DISCUSSION**

Electrohydraulic and laser lithotripsy to treat basket impaction have been described for the common bile duct (1). However, pancreatic cases may be more challenging and the reports in the literature are scarce (2). SOP-guided lithotripsy should be part of the endoscopic armamentarium in these selected cases (3).

## **REFERENCES**

- 1. Deprez PH, Garces Duran R, Moreels T, et al. The economic impact of using single-operator cholangioscopy for the treatment of difficult bile duct stones and diagnosis of indeterminate bile duct strictures. Endoscopy 2018;50(2):109-18. DOI: 10.1055/s-0043-121268
- 2. Ogura T, Okuda A, Imanishi M, et al. Electrohydraulic lithotripsy for pancreatic duct stones under digital single-operator pancreatoscopy (with video). Dig Dis Sci 2019;64(5):1377-82. DOI: 10.1007/s10620-018-5374-z
- 3. Rodríguez Muñoz S. Cholangioscopy: seeing to believe, seeing to know, seeing to cure. Rev Esp Enferm Dig 2018;110(12):745-7. DOI: 10.17235/reed.2018.5991/2018



Fig. 1. Single-operator pancreatoscopy by Spyglass™ DS was performed to free a trapped basket with an impacted stone in the main pancreatic duct.



Fig. 2. Single-operator pancreatoscopy guided electrohydraulic lithotripsy. The trapped basket with a hard pancreatic stone was retained in a short stenosis. Three probes were needed to complete the lithotripsy procedure.