

A tricky pancreatic stone face to an expanding endoscopic armamentarium: we can lose a battle but not the war

Enrique Pérez-Cuadrado-Robles¹, Paul Kisoka², Benjamin Alexandre³ and Pierre H. Deprez¹

¹Department of Gastroenterology. Cliniques Universitaires Saint-Luc. Brussels, Belgium. ²Department of Gastroenterology. Grand Hôpital de Charleroi. Charleroi, Belgium. ³Department of Internal Medicine and Hepato-Gastroenterology Unit. Notre-Dame de Grâce Hospital. Gosselies, Belgium

Correspondence: Enrique Pérez-Cuadrado Robles. **e-mail:** kikemurcia@gmail.com

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 lithotripter 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 non-contact 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.



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.

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).

Pérez-Cuadrado-Robles E, Kisoka P, Alexandre B, Deprez PH. A tricky pancreatic stone face to an expanding endoscopic armamentarium: we can lose a battle but not the war. *Rev Esp Enferm Dig* 2019; 111(11):880.

DOI: 10.17235/reed.2019.6264/2019

REFERENCES

1. Deprez PH, Garcés 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