

BRIEF REPORT

Clin Endosc 2020;53:241-242
https://doi.org/10.5946/ce.2019.193
Print ISSN 2234-2400 • On-line ISSN 2234-2443

Open Access

Treatment of Bouveret Syndrome with Electrohydraulic Lithotripsy

Maria-Ana Rafael, Luísa Figueiredo, David Horta and Alexandra Martins

Department of Gastroenterology, Hospital Professor Doutor Fernando Fonseca, Amadora, Portugal

Bouveret syndrome (BS) is a rare form of gallstone ileus in which the gallstone impacts in the duodenum. Although its treatment is surgical, endoscopic approaches have been used in severely ill patients.

BS was diagnosed in a 73-year-old man with multiple comorbidities: a cholecystoduodenal fistula and a 44-mm gallstone in the third portion of the duodenum (D3). Esophago-gastroduodenoscopy (EGD) was performed, which revealed a gallstone occlusion (Fig. 1); we created a tunnel through the stone, culminating in its passage to the jejunum. Resolution of the occlusion and fragment migration downstream was achieved, with the largest fragment remaining in D3 (Fig. 2). On the following day, another EGD was performed to remove the residual fragments. Complete clinical resolution was achieved a few days after the procedure.

Few cases of BS treated with electrohydraulic lithotripsy (EHL) have been described. Most gallstones were impacted in the bulb or in the second part of the duodenum, the largest being 47 mm in diameter.¹ Although EHL is a laborious procedure and carries a risk of duodenal wall perforation or treatment failure, it can prevent the need for surgery.

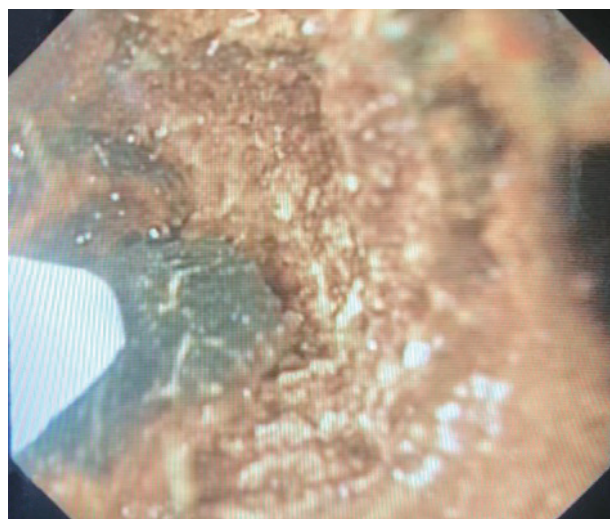


Fig. 1. Electrohydraulic lithotripsy probe during the procedure.

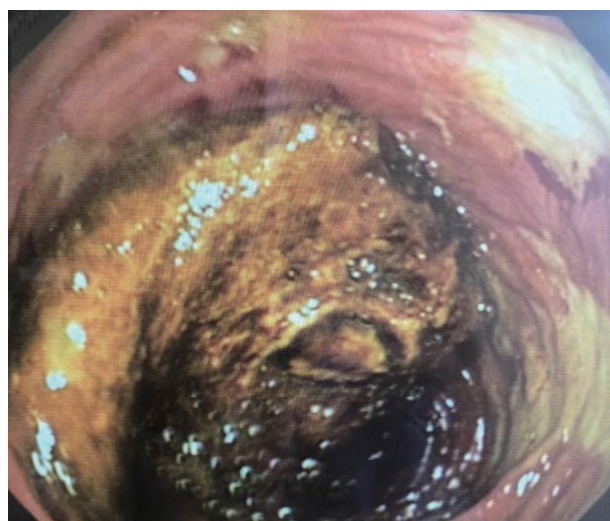


Fig. 2. Fragmented gallstone in the third portion of the duodenum. Erosions are observed on the duodenal wall.

Received: September 17, 2019 Accepted: September 26, 2019

Correspondence: Maria-Ana Rafael
Department of Gastroenterology, Hospital Professor Doutor Fernando Fonseca,
IC 19, Amadora 2720-276, Portugal
Tel: +351-91-192-1578, **Fax:** +351-21-434-5566, **E-mail:** maria.monteiro.rafael@gmail.com
ORCID: <https://orcid.org/0000-0001-9055-1399>

© This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Conflicts of Interest

The authors have no financial conflicts of interest.

Author Contributions

Conceptualization: David Horta

Supervision: Alexandra Martins

Writing-original draft: Maria-Ana Rafael

Writing-review&editing: Luísa Figueiredo

ORCID

Luísa Figueiredo: <https://orcid.org/0000-0002-5792-4947>

David Horta: <https://orcid.org/0000-0002-6529-050X>

Alexandra Martins: <https://orcid.org/0000-0002-4807-9569>

REFERENCES

1. Dumonceau JM, Devière J. Novel treatment options for Bouveret's syndrome: a comprehensive review of 61 cases of successful endoscopic treatment. *Expert Rev Gastroenterol Hepatol* 2016;10:1245-1255.