Broken handle cord of impacted biliary basket – rescue by cholangioscopy with laser lithotripsy

Endoscopic retrograde cholangiopancreatography (ERCP) is the gold standard procedure for the treatment of bile duct stones, and most stones are successfully removed with accessories such as biliary baskets or extraction balloons. Impaction of a biliary basket is not an uncommon complication of this procedure, being reported in 0.8% – 5.9% of cases. Mechanical lithotripsy usually solves the problem by crushing the stone, followed by extraction of the stone fragments. However, on rare occasions, fracture of the basket occurs during mechanical lithotripsy, and this can pose a special management problem, depending on where the breakage occurs [1 – 3]. We report the successful management of an impacted biliary basket after breakage of the basket handle cord during extra-endoscopic mechanical lithotripsy.

A 35-year-old man, who had undergone early laparoscopic cholecystectomy in a small regional hospital 1 month before, presented with jaundice and upper right quadrant pain on admission. Laboratory tests revealed obstructive jaundice with raised γ-glutamyl transpeptidase (γGT) and alkaline phosphatase (ALP) and a total bilirubin concentration of 11.11 mg/dL. Apart from a mildly dilated common bile duct (CBD) with stones, computed tomography of the abdomen revealed no...
abnormalities. ERCP was undertaken as part of the treatment plan. After successful cannulation and sphincterotomy, two small stones were captured with a 20-mm basket but could not be extracted due to the discrepancy between the size of the stones and the small diameter of the distal CBD; in addition, it proved impossible to retrieve the stones from the basket. For this reason, extraendoscopic mechanical lithotripsy using a Soehendra lithotriptor was undertaken, but the handle cord broke 15 cm from the basket and the basket–stone complex remained impacted, with the cord end flapping freely in the lumen of the duodenum (▶ Fig. 1). The next day the patient underwent ERCP with cholangioscopy and laser lithotripsy, and the stones were crushed within the impacted biliary basket; this was followed by successful extraction of the basket together with the fragments (▶ Video 1). The final occlusion cholangiogram showed the CBD to be cleared (▶ Fig. 2).

Competing interests

The authors declare that they have no conflict of interest.

The authors

Tomislav Bokun¹, Mario Tadic¹, Admir Kurtcehajic²,³, Ivica Grgurevic¹, Milan Kujundzic¹
1 Department of Gastroenterology, University Hospital Dubrava, Zagreb, Croatia
2 Gastroenterology Unit, Department of Internal Medicine, Plava Poliklinika Medical Center, Tuzla, Bosnia and Herzegovina
3 Medical Faculty, University of Tuzla, Tuzla, Bosnia and Herzegovina

Corresponding author

Admir Kurtcehajic, MD
Plava Poliklinika Medical Center,
3rd Tuzlanska Brigada No. 7, 75000 Tuzla,
Bosnia and Herzegovina
Fax: +387-35-393111
admircg7@gmail.com

References


Bibliography

DOI https://doi.org/10.1055/a-1167-0904
Published online: 2020
Endoscopy
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

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

Endoscopy E-Videos is a free 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.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos