Elective endoscopic gallbladder treatment in patient with recurrent gallbladder colic and high surgical risk

An 80-year-old woman presented with a 1-year history of recurrent right upper quadrant colicky pain. Her medical history included abdominal surgery, ischemic stroke with impaired mobility, and obesity (body mass index > 30.1 kg/cm²).

Transabdominal ultrasound showed distended gallbladder with thickened walls and two large stones (4 cm and 3 cm). Endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) followed by intra-cholecystic lithotripsy was offered as a minimally invasive treatment alternative to surgery and scheduled for 2 weeks later.

EUS examination confirmed gallbladder wall thickening and two large stones (▶ Video 1). Transduodenal EUS-GBD using a 15 × 10 mm AXIOS stent (Boston Scientific, Marlborough, Massachusetts, USA) mounted onto a cautery device was successfully performed (▶ Fig. 1).

After 48 hours, the central stent was dilated up to 15 mm and the gallbladder lumen accessed with a gastroscope. After adequate water irrigation, holmium laser lithotripsy with variable pulse power and frequencies was performed [1], and fragmented stones were flushed out or removed using a Dormia basket or Roth net until complete gallbladder clearance was achieved (▶ Fig. 2). No adverse events occurred and the patient was discharged.

Outpatient cholecystoscopy 2 weeks later revealed complete gallbladder clearance. The stent was removed using a grasping forceps (▶ Fig. 3) and exchanged for two double-pigtail stents (7 Fr, 4 cm), which were left in place (▶ Fig. 4).

Elective endoscopic gallbladder treatment has been described previously in five relatively young patients with a mean age of 50 years and giant gall-
stones, who rejected surgery and desired
gallbladder preservation [2]. With an
aging population, the number of elderly
frail individuals at high surgical risk and
gallstone disease requiring surgical inter-
vention is expected to increase [3], and
elective endoscopic gallbladder treat-
ment may be a valid alternative treat-
ment option in such patients.

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Competing interests

Dr. Larghi is a consultant for Boston Scientific
Corp. and Pentax Medical. He has also re-
ceived research support from Medtronic. All
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flict of interest.

The authors

Mario Gagliardi1 @ Gianenrico Rizzatti1,2,
Michele Impagnatiello2, Alberto Larghi1,2
1 Digestive Endoscopy Unit, Fondazione
Policlinico Universitario A. Gemelli IRCCS,
Rome, Italy
2 CERTT, Center for Endoscopic Research
Therapeutics and Training, Catholic
University, Rome, Italy
3 Internal Medicine, Gastroenterology and
Hepatology, Fondazione Policlinico
Università A. Gemelli IRCCS, Rome, Italy

Corresponding author

Alberto Larghi, MD, PhD
Digestive Endoscopy Unit, Fondazione
Policlinico Universitario A. Gemelli IRCCS,
Largo A. Gemelli 8, 00168 Rome, Italy
alberto.larghi@policlinicogemelli.it

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