An alternative treatment for postcholecystectomy Mirizzi's syndrome: cystic duct balloon dilation

Fig. 1 Stone removal in postcholecystectomy Mirizzi's syndrome. **a** On balloon-occluded cholangiogram, a stone was observed in the cystic stump (black arrow). **b** The cystic duct was dilated using a large balloon (white arrows); the balloon's notch is seen at the level of the narrowed segment of the cystic duct (black arrow). **c** The stone was removed using an extraction balloon. **d** Stone removal was confirmed by cholangiography.

Postcholecystectomy Mirizzi's syndrome is an extremely rare condition that is caused by a stone in the cystic duct remnant. Remnant cystic duct calculus could be due to either a retained stone or recurrence of a stone [1]. A 68-year-old woman with jaundice, fever, and abdominal pain was admitted to our hospital. She had been diagnosed with type-1 Mirizzi's syndrome 8 months previously and had undergone laparoscopic cholecystectomy. Laboratory studies at our hospital revealed the following results: leukocyte count 27430, alanine aminotransferase 88 U/L, aspartate aminotransferase

173 U/L, gamma glutamyl transferase 484 U/L, lactate dehydrogenase 624 U/L, total serum bilirubin 7.36 mg/dL, and direct serum bilirubin 5.67 mg/dL. She underwent endoscopic retrograde cholangiopancreatography (ERCP). During cholangiography, a stone measuring nearly 1 cm was observed at the junction of the common bile duct (CBD) and cystic duct stump, causing compression of the CBD (Fig. 1 a). The stone could not be extracted with a balloon or captured by a basket despite several attempts at retrieval. The junction of the CBD and cystic duct was therefore dilated using a 12-mm balloon

(Fig. 1 b), and the stone was removed using an extraction balloon (Fig. 1 c). The removal of the stone was confirmed by cholangiography (Fig. 1 d).

This is the first case in the literature describing balloon dilation at the junction of the CBD and cystic duct stump for the treatment of postcholecystectomy Mirizzi's syndrome. Although ERCP is traditionally used before surgery [2], we consider that this is an effective and safe alternative method for the treatment of postcholecystectomy Mirizzi's syndrome.

Endoscopy_UCTN_Code_TTT_1AR_2AH

Competing interests: None

Bülent Odemis, Erkin Oztaş, Muhammet Yener Akpınar, Serkan Torun, Ufuk Baris Kuzu, Ertugrul Kayacetin

Gastroenterology Department, Türkiye Yüksek İhtisas Training and Research Hospital, Ankara, Turkey

References

- 1 Shaw C, O'Hanlon DM, Fenlon HM et al. Cystic duct remnant and 'postcholecystectomy syndrome'. *Hepatogastroenterology* 2004; 51: 31–38
- 2 Zheng M, Cai W, Qin M. Combined laparoscopic and endoscopic treatment for Mirizzi syndrome. *Hepatogastroenterology* 2011; 58: 1099–1105

Bibliography

DOI <http://dx.doi.org/10.1055/s-0034-1392593>
Endoscopy 2015; 47: E371
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author

Muhammet Yener Akpınar, MD
Gastroenterology Department
Türkiye Yüksek İhtisas Training and Research Hospital
Kızılay Street
06100 Sıhhiye
Ankara
Turkey
Fax: +90-312-4120
muhammet.yener@gmail.com