

Some studies have reported that endoscopic balloon dilation (EBD) for extracting common bile duct stones is associated with higher complication rates in comparison with endoscopic sphincterotomy (EST) [1], although EBD has been found to be a safe method in other reports [2, 3]. However, it appears that EBD should be used with extreme caution in patients aged 50 years or younger [4], since in relatively young and healthy patients, the technique has been associated with increased rates of pancreatitis, leading even to death [5]. In this group of patients, the complication rate with EBD appears to be higher than with endoscopic biliary sphincterotomy. The morbidity associated with EBD is presumed to be due to edema or spasm caused by the trauma of dilation, which can lead to transient obstruction of the pancreatic duct and trigger the inflammation cascade of pancreatitis. This effect may be more pronounced in young patients, while older ones may have a less severe inflammatory response [6].

I would like to report here the death of an elderly woman following EBD. The 80-year-old woman underwent endoscopic retrograde cholangiopancreatography (ERCP) due to cholangitis. A distorted papillary area was found, probably related to scarring after the healing of a duodenal ulcer. Bile duct cannulation was easy. Cholangiography revealed two stones approximately 8 mm in diameter. Although EBD is not routinely carried out in our institution, the technique was deemed to be less risky than EST in this patient, due to the abnormal anatomy.

An 8-mm dilation balloon (MaxForce, Boston Scientific/Microvasive, Natick, Massachusetts, USA) was passed over a guide wire and inflated to maximum pressure for 1 min. The stones and biliary sludge were extracted by means of retrieval balloons and a Dormia basket. As the patient had cholangitis and complete bile duct clearance was not certain, a 7-Fr double pigtail stent, 7 cm long, was inserted at the end of the procedure to ensure biliary drainage [4].

After the procedure, the patient developed acute pancreatitis. She had to be admitted to the intensive-care unit 48 h later because of persistent ileus and renal failure. Respiratory distress occurred and mechanical ventilation became necessary. She died 34 days after the ERCP.

This unfortunate case may raise further concern regarding the safety of EBD, even in elderly patients. It is certainly an isolated case. In addition, the fact that the ERCP unit concerned is a small one may involve some reporting bias in the analysis of the complication. However, the center has never previously encountered such a severe complication after EST for choledocholithiasis following an easy bile duct cannulation [7]. Some authors consider that EBD should be avoided in routine clinical practice [5]. EBD should be regarded as a risky procedure, even in older patients and when it is carried out instead of EST in order to avoid potential complications.

Endoscopy_UCTN_Code_CPL_1AK_2AF

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References

- 1 Arnold JC, Benz C, Martin WR et al. Endoscopic papillary balloon dilation vs. sphincterotomy for removal of common bile duct stones: a prospective randomized pilot study. *Endoscopy* 2001; 33: 563–567
- 2 Inomata M, Endo M, Obara H et al. Endoscopic papillary balloon dilation in the management of common bile duct stones in patients with Roux-en-Y reconstruction. *Endoscopy* 2004; 36: 669–
- 3 Takezawa M, Kida Y, Kida M, Saigenji K. Influence of endoscopic papillary balloon dilation and endoscopic sphincterotomy on sphincter of Oddi function: a randomized controlled trial. *Endoscopy* 2004; 36: 631–637
- 4 Baron TH, Harewood GC. Endoscopic balloon dilation of the biliary sphincter compared to endoscopic biliary sphincterotomy for removal of common bile duct stones during ERCP: a metaanalysis of randomized, controlled trials. *Am J Gastroenterol* 2004; 99: 1455–1460
- 5 DiSario J, Freeman ML, Bjorkman DJ et al. Endoscopic balloon dilation compared with sphincterotomy for extraction of bile duct stones. *Gastroenterology* 2004; 127: 1291–1299
- 6 DiSario J. Endoscopic balloon dilation for extraction of bile duct stones: the devil is in the details. *Gastrointest Endosc* 2003; 57: 282–285
- 7 García-Cano Lizcano J, González Martín JA, Morillas Ariño MJ, Pérez Sola A. Complications of endoscopic retrograde cholangiopancreatography: a study in a small ERCP unit. *Rev Esp Enferm Dig* 2004; 96: 63–173

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