Title:
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A new single-use disposable duodenoscope (EXALT™ Model D) for the treatment of an anastomotic biliary stenosis in a liver transplant patient.

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KEYWORDS:

Dear Editor,

A 54-year-old man was admitted by painless jaundice at our hospital four weeks after undergoing liver transplantation. Magnetic resonance imaging cholangiography demonstrated the presence of anastomotic biliary stenosis.

Endoscopic retrograde cholangiopancreatography (ERCP) was indicated for treatment. A new single-use duodenoscope (EXALT™ Model D, Boston Scientific®) (Fg1.A-1.B) with a 4.2mm working channel and an elevator nail, was employed. Fluoroscopy demonstrated a mid-common bile duct stricture and a retrograde dilatation of the intrahepatic ducts (Fg1.C). Biliary balloon dilation up to 6mm (Hurricane, Boston Scientific®) and retrograde stenting (fully-covered metal stent; 10x80mm Wallflex) under X-ray monitoring was performed to treat the stenosis. The patient presented a good clinical
response and did not have adverse events. No technical difficulties were registered during or after the procedure.

Discussion
In recent years, a number of studies have documented a concerning increase in the transmission of Multidrug-Resistant Organisms (MDRO) from contaminated duodenoscopes (1). The complex design of the duodenoscope tip and the biofilms formation might cause suboptimal reprocessing and cleaning (2). Recent studies have suggested that single-use duodenoscopes may prevent these risks, with the same safety and technical performance of reusable ones (3). Although indications are yet to be defined, it would be reasonable to consider using them in: patients colonized with a MDRO due to its higher risk of bacterial transmission, patients who need multiple interventions on the bile duct such as those with primary sclerosing cholangitis and immunosuppressed patients with a higher risk for serious infections (such as those following a liver transplant patients) (4).

We report for the first time in our country, the successful use of a disposable duodenoscope to treat a biliary stenosis in a liver transplant patient. The availability of these new scopes within our therapeutic arsenal may be clinically useful, as in the well established case of disposable bronchoscopes (5). However, in order not to unnecessarily increase costs on Units, we advocate to use them only in selected cases.

REFERENCES
**FIGURES**

**A**

[Image of a single-use duodenoscope provided by BostonScientific®]

**B**

[Endoscopic image of the papilla during the cannulation process provided by the EXALT™ Model D, BostonScientific®]

**C**

[Fluoroscopy: a mid-common bile duct stricture (indicated by the red arrow) and a retrograde dilatation of the intrahepatic ducts]

**Fig 1.A.** Single-use duodenoscope (EXALT™ Model D, BostonScientific®), figure provided by BostonScientific®. **Fig 1.B** Endoscopic image of the papilla during the cannulation process provided by the EXALT™ Model D, BostonScientific®. **Fig 1.C.** Fluoroscopy: a mid-common bile duct stricture (indicated by the red arrow) and a retrograde dilatation of the intrahepatic ducts.