

## Two-sphincterotomes-in-one-channel method: help in cannulation and sphincterotomy

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### INTRODUCTION

Deep cannulation of the desired channel (biliary or pancreatic) is the basic requirement to successfully perform a therapeutic endoscopic retrograde cholangiopancreatography (ERCP). In biliary cannulation, we have a broad armamentarium of standard and specialized techniques. However, failure rates can range from 1-10%. The consequences of failure in cannulation are serious: repetition of the ERCP, alternative procedures with morbidity and significant cost, as well as higher rates of complications (1). Therefore new techniques are arising that attempt to improve results without increasing these adverse effects.

The performance of sphincterotomy is another very important step in completing biliary therapy (2). However, on some occasions the sphincterotomy is made more difficult due to the presence of a transverse duodenal fold that covers the papilla of Vater and impedes the safe completion of this technique.

### TECHNIQUE AND CASES

We present a new technique that involves simultaneously introducing into the therapeutic channel duodenoscope two sphincterotomes: MT-25 (5 French) and CT-25M (6 French) (Cook) (Figs. 1A and B). Through coordinated movements of both sphincterotomes we can fix the papilla (Case 1) or clear the transverse duodenal fold (Case 2), achieving cannulation or performing a safe sphincterotomy, respectively.

#### Case 1

Patient with obstructive jaundice in which the papilla presented characteristics of difficult cannulation (elongated morphology, soft consistency, very mobile, and small orifice) (Fig. 2A). The cannulation was not achieved through conventional methods. Using two sphincterotomes, access to the biliary channel was achieved (Fig. 2B), avoiding the use of pre-cutting. There were no complications.

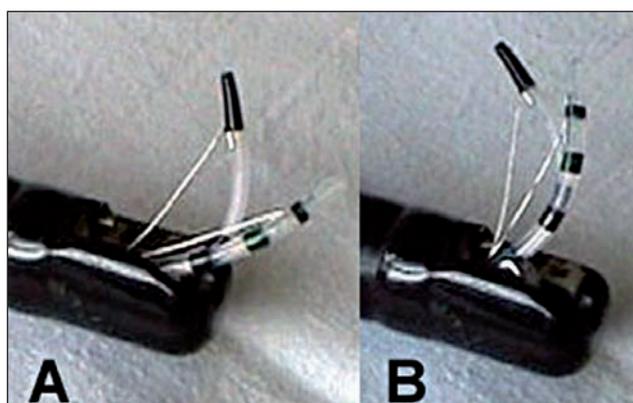


Fig. 1. Coordinated movements of both sphincterotomes in the same duodenoscopy channel.

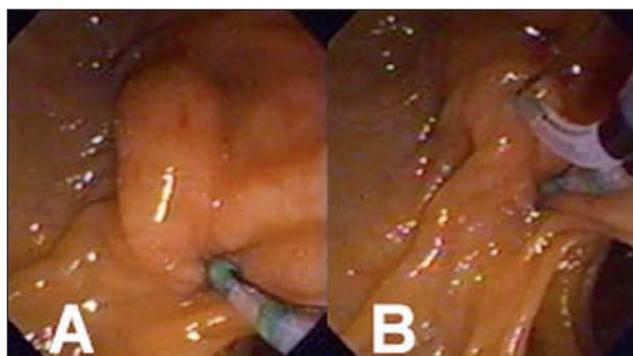


Fig. 2. A. A sphincterotome fixes the base of the papilla to avoid its displacement. B. With the second sphincterotome cannulation of the previously immobilized papilla is achieved.

## Case 2

Patient with choledocholithiasis requiring sphincterotomy for its extraction. The transverse duodenal fold covered the papilla of Vater and impeded the safe completion of the sphincterotomy (Fig. 3A). Through this new technique (2 sphincterotomes) we were able to raise the fold and safely complete the sphincterotomy at the same time (Fig. 3B). Extraction of the calculi was subsequently performed without complications.

## DISCUSSION

The use of two devices simultaneously in the same duodenoscopy channel was reported in 1998 as a method for attempting to cannulate intradiverticular papilla (3). We present the novel joint use of two sphincterotomes in two different situations. We believe that in the cases presented the sphincterotome also makes possible the traction and arching of the distal end through the opening and closing of the handle, allowing the papilla to be fixed (Case 1), or elevate the transverse fold (Case 2), completing the treatment. We have used this technique in three more patients with difficulty in cannulation and/or prominent duodenal fold, with very good results. The endoscopist should know how to use the best approach in each patient. His/her technique should be adaptable to the individual risk profile and the papillary anatomy. Our technique can be useful in selected patients.

## REFERENCES

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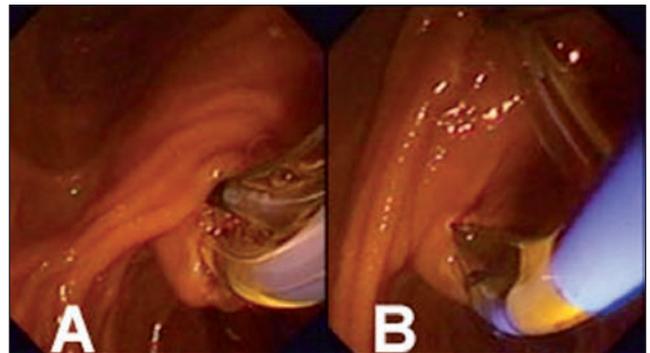


Fig. 3. A. Cannulation of the biliary channel with sphincterotome CT-25M. The transverse duodenal fold covers the papilla and impedes a safe sphincterotomy. B. The second sphincterotome elevates the transverse fold, permitting completion of the sphincterotomy.