

## **Introduction**

Endoscopic ultrasound (EUS)-guided drainage followed by direct endoscopic necrosectomy (DEN) is now the preferred method of treatment of patients with symptomatic walled-off pancreatic necrosis (WOPN) <sup>(1,2)</sup>. Very few dedicated instruments are available to perform DEN, one of which is the EndoRotor (Interscope, Inc.); a powered endoscopic debridement system. We present a case of DEN performed in a patient with a large and infective WOPN using the 3mm-EndoRotor.

## **Methods**

A 48-year-old gentleman was admitted to hospital with acute severe necrotising pancreatitis secondary to alcohol, complicated by splenic vein thrombosis. He developed an infected WOPN measuring 24 x 32cm, causing multi-organ failure and a prolonged admission on the intensive care unit. An EUS-guided cystgastrostomy was performed using a 15mm lumen-apposing metal stent (Hot Axios), between the stomach and the WOPN, which was found to have 90% necrotic material. Direct endoscopic necrosectomy (DEN) was subsequently performed using the 3mm EndoRotor, which was passed through the 3.2mm channel of a gastroscope. A 10- and 15-mm snare were used alongside the EndoRotor to complete the DEN.

## **Results**

DEN was successfully completed using the EndoRotor; necrotic material was completely cleared following over 12 hours of DEN. There were no significant adverse events associated with using the EndoRotor. Endoscopists found it easy and intuitive to handle.

## **Conclusion**

Severe acute pancreatitis and its complications, including WOPN, are becoming increasingly prevalent, with a shift in paradigm from surgical management to endoscopic therapy <sup>1</sup>. It is therefore essential that we work towards optimising the effectiveness and safety of these endoscopic procedures.

The EndoRotor is one of the few endoscopic tools specifically designed for DEN. Various studies and case reports have demonstrated positive results with its use, including its safety profile <sup>2</sup>. This case was particularly challenging as the WOPN was large, with extension into the pelvis and the EndoRotor facilitated quick clearance of necrotic material safely.

## **References**

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2. Binda C, Coluccio C, Vizzuso A, Sartini A, Sbrancia M, Cucchetti A, et al. Direct Endoscopic Necrosectomy of a Recurrent Walled-Off Pancreatic Necrosis at High Risk for Severe Bleeding: A Hybrid Technique Using a Dedicated Device. *Diagnostics*. 2023 Jul 10;13(14):2321.