Direct endoscopic necrosectomy with the newly developed 6-mm powered rotating resection catheter: When size matters

A 41-year-old man with acute pancreatitis of unknown etiology developed a 17 × 8-cm walled-off necrosis (WON) that was drained percutaneously. The purulent fluid grew *Klebsiella* and *Candida albicans*. After transfer to our hospital, endoscopic ultrasound (EUS)-guided drainage was performed, and a 20 × 10-mm Axios stent was placed. The solid component of the WON was about 90% and direct endoscopic necrosectomy (DEN) was scheduled. DEN was started with a 3.2-mm EndoRotor catheter that broke after a few minutes of use. The following day, the new 6-mm EndoRotor catheter was utilized in association with an Olympus GIF-XTQ160 scope. The catheter was placed through the Axios stent (▶Fig. 1), and in a 70-minute procedure, it was able to aspirate all necrotic content, amounting to 800 mL of collected material (▶Video 1).

A 77-year-old woman developed biliary acute pancreatitis, complicated by the formation of a large infected WON (16 × 10 mm, necrotic content 80%), which was drained emergently using a 20 × 10-mm Axios stent. DEN was performed 3 days later using the 6-mm EndoRotor catheter, and in a 90-minute procedure, 90% clearance of the necrotic content amounting to 600 mL of collected material had been achieved.

We report, for the first time, utilization of the new 6 mm EndoRotor catheter, which represents an evolved version of the 3.2-mm tool, the first dedicated device for DEN [1–3]. This new catheter can be used with the Olympus GIF-XTQ160 scope (▶Fig. 2 a) or with an accessory catheter channel that can be attached to an Olympus GIF290 or equivalent Fuji/Pentax scopes (▶Fig. 2 b). Compared to the 3.2-mm catheter, the 6.0-mm catheter has a 4.4-times larger cutting window and a 2.5-times larger inner lumen, which allows for an 8-times greater throughput and possibly faster and more effective DEN. The average number of procedures required to treat WON with the 3.2-mm catheter has been reported to be 2.1; this number might be decreased by use of the 6-mm device [4].

Competing interests

The authors declare that they have no conflict of interest.
The authors

Gianenrico Rizzatti1, Mario Gagliardi2, Giulia Tripodi1, Michele Impagnatiello3, Antonio Gasbarrini1,4, Guido Costamagna1, Alberto Larghi1

1 Digestive Endoscopy Unit, Fondazione Policlinico Universitario A. Gemelli IRCCS, Rome, Italy
2 Digestive Endoscopy Unit, San Giovanni di Dio e Ruggi d’Aragona University Hospital, Salerno, Italy
3 UOC di Medicina Interna e Gastroenterologia, Dipartimento di Scienze Mediche e Chirurgiche, Fondazione Policlinico Universitario A. Gemelli IRCCS
4 Dipartimento di Medicina e Chirurgia Traslazionale, Università Cattolica Del Sacro Cuore

Corresponding author

Alberto Larghi, MD, PhD
Digestive Endoscopy Unit, Fondazione Policlinico Universitario A. Gemelli IRCCS, Largo A. Gemelli 8, 00136 Rome, Italy
Fax: +39-06-30156581
alberto.larghi@policlinicogemelli.it

References


Bibliography

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