

When to remove a lumen-apposing metal stent for pancreatic fluid collections?



Dear Editor:

We read with great interest the article by Willems P and colleagues [1] reporting a retrospective investigation of the timing of lumen-apposing metal stent (LAMS) removal during endoscopic ultrasound-guided treatment of pancreatic fluid collections (PFCs). In an analysis of 108 consecutive patients, early (≤ 4 weeks) stent removal was associated with a lower clinical success rate compared to late (> 4 weeks) stent removal (70% vs. 96%, respectively). The risk of clinical failure associated with early stent removal persisted after the vigorous adjustment of multiple confounding factors. The findings would help us to consider and standardise the treatment algorithm for this patient population.

Patients with difficult-to-treat PFC lesions are more likely to undergo prolonged stent placement and thus be categorised as the late removal group. Given this bias due to the retrospective study design, the findings of the high clinical success rate associated with prolonged stent placement were considered striking. Here, we commend the authors for providing additional information for a better understanding and clinical application of these results. First, what were the major reasons for clinical failures in the early stent removal group? Clinical failures may occur due to multiple factors including endoscopically inaccessible lesions, exacerbating infection, and procedure-related adverse events. In the current study, endoscopic necrosectomy was required more frequently in the early removal group. In our previous multicentre study [2], walled-off necrosis was associated with a lower clinical success rate compared to pseudocysts. Therefore, we are interested in how the association of LAMS removal timing with clinical outcomes differed by the levels of internal necrosis (walled-off necrosis vs. pseudocysts or the percentage of necrosis). Second, was a LAMS replaced with

plastic stent(s) to avoid LAMS-related adverse events and ensure the continuous drainage effect, as conducted at some centres [3,4]? If a LAMS was replaced with plastic stent(s) in the early stent removal group, technical difficulties in subsequent endoscopic necrosectomy might result in a high propensity for technical failure. Based on the clinically relevant insights from the current study, we should optimise the duration of LAMS placement during EUS-guided treatment of PFCs. The current study examined a single cut-off point (i.e., four weeks); hence, future studies should examine various cut-off points and determine the optimal duration of LAMS placement [5].

In conclusion, this study points to the risk of clinical failure associated with premature LAMS removal during endoscopic management of PFCs. A better understanding of the mechanism through which early LAMS removal increases the risk of clinical failure would facilitate the designation of a new treatment protocol. It is also important to identify subgroups at high risk of clinical failure due to early removal. If the results are validated, we endoscopists will be prompted to conduct a prospective randomised trial to elucidate the optimal duration of LAMS placement and improve clinical outcomes of patients with PFCs.

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Conflict of Interest

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