



Endoscopic drainage of pancreatic fluid collections: the inevitable shift to metal

Endoscopic drainage of symptomatic pancreatic fluid collections (PFCs) has become the preferred treatment over percutaneous and surgical options. Plastic drainage stents have been the traditional choice. More recently, the paradigm has shifted toward using metal stents for drainage because of their larger lumen diameter and antimigration features. Both biliary fully covered self-expanding metal stents (FCSEMSs) and lumen-apposing metal stents (LAMSs) have shown efficacy¹⁻¹⁰; however, no direct comparison has been described.

The article by Vazquez-Sequeiros et al¹¹ further promotes this trend by illustrating the efficacy and safety of metal stents in draining symptomatic PFCs in a large, multicenter analysis. The reported technical success rates and clinical success rates are 97% and 85%, respectively, with an adverse event (AE) rate of 21%, which is in line with previously published studies. Interestingly, the authors report that 7% of the clinical failures (15 patients) were because of persistent infection, perforation, and/or bleeding after stent placement requiring surgical intervention. It would be interesting to know whether these clinical failures were in patients who received smaller-diameter biliary FCSEMSs as compared with LAMSs and in pseudocysts versus walled-off pancreatic necrosis (WOPN), because larger-diameter LAMSs would likely be more efficacious in infected or necrotic collections.

Although the AE rate in this article is consistent with prior studies, it may be unintentionally inflated. Eleven patients with AEs were described as having AEs because of required repeat endoscopic therapy, including necrosectomy. Previous studies have shown that up to 70% of patients with WOPN will require endoscopic necrosectomy in addition to a LAMS or esophageal FCSEMS placement,⁷ and those patients are still able to achieve clinical success after direct endoscopic necrosectomy through the stent without the need for acquiring additional access to the collection.^{7-10,12} It would be important to know whether the repeat endoscopic sessions were required in patients with WOPN or in patients with biliary FCSEMSs because LAMSs (or esophageal FCSEMSs) would be expected to be more efficacious in those types of PFCs.^{7-10,12}

Although it is clear that metal stents are efficacious and safe, the superiority of 1 metal stent over another has not

yet been demonstrated. This article attempted to ascertain that superiority by comparing the efficacy and safety between biliary FCSEMSs and LAMSs as a secondary endpoint. In their conclusion, the authors reported no significant difference between the 2 types of stents. However, this conclusion is not justified by the provided analysis. First, it is unclear whether equal numbers of each type of stent were used in pseudocysts and WOPN, which is critical given that efficacy and safety rates would be expected to be higher with pseudocysts when compared with WOPN. Additionally, WOPN often requires follow-up necrosectomy

Overall, this article adds valuable additional evidence in support of the superiority of endoscopic drainage for symptomatic pancreatic fluid collections and specifically the efficacy and safety of metal drainage stents.

after drainage stent placement, which would intuitively favor LAMS placement; however, this was not addressed in the article. Second, it is also unclear which AEs were associated with each type of stent. Such data are critical to determine safety differences between stents.

Interestingly, the authors report that half of the included patients received double-pigtail plastic stents in addition to a metal stent. Plastic stents can help prevent metal stent migration and decrease delayed bleeding by preventing friction between the edge of the metal stent and the wall of the collection. It is important to know whether the patients in whom stent migration or bleeding occurred were patients who received plastic stents.

Overall, this article adds valuable additional evidence in support of the superiority of endoscopic drainage for symptomatic PFCs, and specifically the efficacy and safety of metal drainage stents. It confirms 2 inevitable trends, that PFCs are preferentially managed endoscopically and that metal stents have become the preferred drainage stent irrespective of their difference in cost.^{1-10,12} However, the lack of any significant superiority of LAMSs over biliary FCSEMSs is not supported by the provided analysis. LAMSs are likely more efficacious, especially in WOPN, as outlined in our current algorithm for PFCs (Fig. 1). Future research

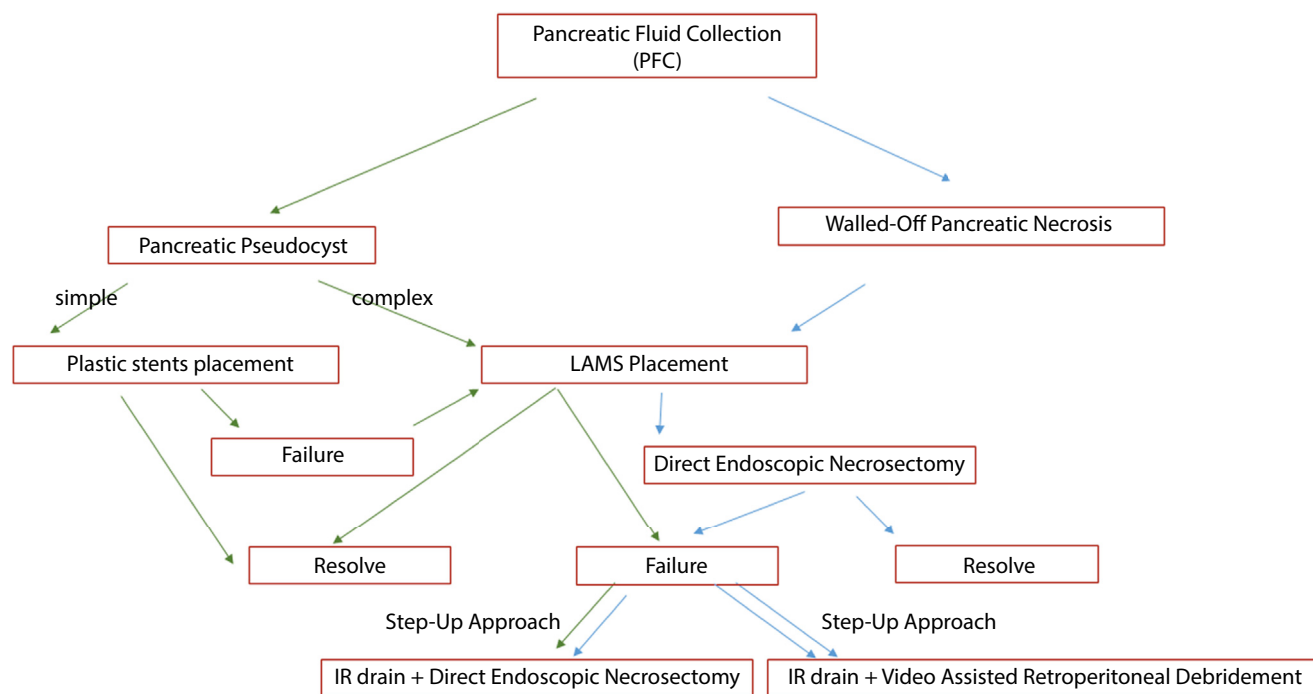


Figure 1. Modern management of drainable pancreatic fluid collections.

in this field should focus on optimization of LAMSs to improve their safety and efficacy.

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Abbreviations: AE, adverse events; FCSEMS, Fully covered self-expanding metal stent; LAMS, lumen-apposing metal stent; PFC, pancreatic fluid collection; WOPN, walled-off pancreatic necrosis.

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