The evolving superiority of covered metallic stents for benign biliary strictures

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We read with interest Coté et al.'s study (1) comparing the outcomes of covered self-expanding metal stents (CSEMS) versus multiple plastic stents in the treatment of benign biliary strictures (BBS). Self-expanding metal stents are well known for their superior stent patency, stent durability and has been a first line stent choice in the treatment of malignant biliary strictures. Recent studies have suggested that they are also efficacious in the treatment of extrahepatic BBS with a high rate of stricture resolution after 1-2 sessions of stent revisions (2,3). This is the first randomized controlled trial evaluating the efficacy of CSEMS as a first-line option in the treatment of BBS. They showed that CSEMS were as effective as plastic stents in achieving stricture solution within a follow-up period of 12 months (1). The number of endoscopic retrograde cholangiopancreatography (ERCP) procedures required to achieve stricture resolution was also significantly lower in the CSEMS group compared to the plastic stent group (2.14 vs. 3.24, P<0.01) (1).

Notably the study excluded patients with non-dilated common bile duct <6 mm and those with low-lying cystic duct, which would have been occluded by a CSEMS. These exclusion criteria are some of the major limitations in using CSEMS in benign disease. Patient selection remains key in the use of CSEMS in benign disease. Additionally the study was not powered to detect difference in adverse event rates. The use of CSEMS has been suggested in some studies to increase the rate of post-ERCP pancreatitis and have a higher stent migration rate compared to uncovered

metal stents (4,5). In era where health care cost is been scrutinized, Coté *et al.*'s (1) study is an important addition showing the efficacy of CSEMS in treatment of BBS in less sessions. However, the question of adverse risks of CSEMS, particularly the rate of migration after CSEMS placement, remains problematic. New generation stents with antimigratory features, already available in Europe and Asia, are expected to resolve this issue and become the new gold standard treatment for BBS.

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

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