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A propensity matched retrospective study of metal vs plastic stents in the preoperative biliary drainage of patients with resectable perihilar cholangiocarcinoma

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outcome was stent failure, which was a composite endpoint of cholangitis and/or re-intervention due to biliary complications or inadequate biliary drainage. Propensity score matching (1:1) was performed to adjust for age, gender, primary sclerosing cholangitis, Bismuth classification, WHO performance status and ASA classification.

Results: A total of 474 patients with successful initial stent placement were included. Of these patients 61 received uSEMS and 413 plastic stents. Matching resulted in two groups of 59 patients. Stent failure occurred significantly less in the uncovered uSEMS group (31% vs 64%, $P<0.001$) and resulted in a significant reduction in the number of repeat ERCP procedures (14% vs 54%, $P<0.001$). Despite this the number of patients eventually required percutaneous transhepatic biliary drainage was similar (9% vs 7%, $P=1$). uSEMS placement was also associated with a reduction in episodes of cholangitis (15% vs 31%, $P=0.012$), although other ERCP and stent related complications did not differ. The number of patients ultimately undergoing surgical resection was not significantly different (81% vs 90%, $P=0.19$) between groups with uSEMS removal during surgery successful in all patients. The median overall survival after initial stent placement was 482 days [95% CI, 338–787] in the uSEMS group and 429 [95% CI, 263–881] in the plastic stent group (log-rank $P=0.81$). Survival after surgical resection was similar and post-operative outcomes also comparable: R1 resections (58% vs 59%, $P=0.569$), complications according to Clavien-Dindo ($P=0.227$), and hepatico-jejunostomy associated complications (leak: 4% vs 14%, $P=0.393$, stricture: 15% vs 21%, $P=0.822$).

Conclusions: Stent failure occurred significantly less often in uSEMS group resulting in fewer drainage procedures and reduced episodes of cholangitis. Removal of uSEMS during surgery was feasible and surgical outcomes were comparable. Although preoperative biliary drainage by uSEMS shows promising results further study is warranted and multicentre randomized controlled trials with a clear treatment strategy should be performed.

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HPB P07 A propensity matched retrospective study of metal vs plastic stents in the preoperative biliary drainage of patients with resectable perihilar cholangiocarcinoma

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Background: Preoperative biliary drainage is required in the majority of patients with resectable perihilar cholangiocarcinoma (pCCA). Most centres use plastic stents rather than uncovered self-expanding metal stents (uSEMS) because of the potential difficulties associated in removing uSEMS. In the palliative setting, however, uSEMS are associated with superior patency and even improved survival. The aim of this study is to compare the utility of uSEMS versus plastic stents in the pre-operative drainage of patients with resectable pCCA.

Methods: In this retrospective, multicentre, international cohort study, all consecutive patients with a high suspicion of resectable pCCA who underwent an initial endoscopic biliary drainage with uSEMS or plastic stent between 2010–2020 were included. Analyses were stratified by groups according to initial stent type. The primary