

follow-up was available. Results: 48 patients underwent ERCP with SOM, an average of 6.8 cases per year. The procedure was successful in 100% of cases. Thirty-seven patients (mean age 41 years, 84% female) underwent SOM for biliary type pain post-cholecystectomy and had follow-up for mean of 16 months (range 1-45 months). Twenty-three patients (62%) were classified as type II sphincter of oddi dysfunction (SOD) and 14 patients (38%) were classified as type III SOD. In the type II SOD population, 10 had basal SO pressures greater than 40 mmHg. All underwent sphincterotomy. Thirteen patients had basal SO pressures less than 40 mmHg. Seven subsequently underwent sphincterotomy. Nine Type II patients (90%) with elevated basal sphincter pressures noted symptom improvement after sphincterotomy compared with only 3 patients (43%) of patients with normal basal pressures (p-value 0.059). In the type III SOD population, 7 patients had elevated basal SO pressure greater than 40 mmHg. All 7 underwent sphincterotomy. Six patients had basal SO pressures less than 40mmHg. Two underwent sphincterotomy. Subsequently, 3 patients with elevated basal pressures (43%) had subjective improvement after sphincterotomy in the compared to 1 patient (50%) with normal pressures (p-value 0.60). The only group that demonstrated a trend toward benefit from sphincterotomy were patients with type II SOD with elevated basal sphincter pressures. There were six (16%) procedure related complications. There were four cases of post ERCP pancreatitis (11%), all of which were mild by consensus criteria (GIE 2009). There was one case of cholangitis and one post-sphincterotomy bleed, both moderate by criteria. Conclusion: In low numbers, SOM can be performed successfully and safely and with results that are comparable to large volume manometry centers.

T1565

A Prospective, Group Sequential Study Evaluating a New Type of Fully Covered Self Expandable Metal Stent With a Proximal Retrieval Lasso for the Treatment of Benign Biliary Strictures

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Background: the use of fully-covered self expandable metal stents (fcSEMS) has shown promise in the treatment of benign biliary strictures. Key to this novel treatment is safe removal. Pulling the stent at its distal end can be complicated since the entire surface area has to detach from the wall of the common bile duct at the same time. Aim: we investigated the feasibility and safety of removal of a fcSEMS (M.I.Tech, Seoul, Korea) with a proximal retrieval lasso: a long wire thread integrated in the proximal ends of the wire mesh that hangs freely in the stent lumen. Pulling it enables gradual removal of the stent inside-out. Secondary aim was success of stricture resolution. Methods: Prospective follow-up study of 3 sequential groups of 8 patients with benign biliary strictures: post-cholecystectomy (LCx), liver transplantation (OLT), strictures due to chronic pancreatitis (CP) or papillary fibrosis (PF). Strictures had to be located at least 2 centimeter below the liver hilum. The first cohort of patients underwent stent placement for 2 months, followed if necessary by 3 months. The second cohort started with 3 months, followed by 4 months if necessary, and the last cohort underwent stent placement for one or two periods of 4 months. Treatment success was assessed by cholangiography and defined as the ability to pass an inflated extraction balloon through the former stricture. Results: 24 patients (11 female; age 20-67 yrs) have been included of which 11 have finished the protocol so far. Strictures were caused by CP (n=13), OLT (n=6), LCx(n=3) and PF(n=2). Thus far 40 fcSEMS have been placed and 27 removed. Removals were easy and without complications and treatment was successful in 8 of 11 patients(73%). Stent placement led to transient pain in 14/24 patients (60%); all could be managed by oral analgesics. Other complications were cholecystitis (1, managed by percutaneous drainage), cholangitis due to stent migration (1, managed by stent replacement) or stent clogging (2, managed endoscopically) and worsening of CP (2). In these patients, the fcSEMS was removed and replaced after pancreatic sphincterotomy and pancreatic stent placement. After the first case of cholecystitis, patients with a gallbladder in situ, received prophylactic antibiotics. Conclusions: removal of a new type of fcSEMS with a proximal retrieval lasso proved easy, feasible and safe, up to 4 months after deployment. Major complications occurred in 15% and attention must be given to the prevention of cholecystitis and outflow obstruction of the pancreatic duct. Follow-up data are awaited to evaluate treatment success and to determine the optimal treatment duration.

T1566

Fully Covered Self-Expandable Metal Stent Versus Plastic Stent in the Treatment of Biliary Leaks After Cholecystectomy: A Multicenter Study

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 BACKGROUND: Endoscopic retrograde cholangiopancreatography (ERCP) with placement of a biliary stent and/or sphincterotomy is the procedure of choice for

treatment of post-cholecystectomy bile duct leaks. The aim of this study was to compare the effect of self-expandable metal stent (SEMS) versus plastic stent (PS) on rates of leak closure, length of hospital stay and number of required endoscopic procedures. METHODS: Between January 2004 and December 2009, medical records were reviewed on 40 patients who underwent open or laparoscopic cholecystectomy complicated by Luschka, cystic or common bile duct leak. 15 patients were treated with SEMS and 25 patients were treated with PS (multistenting). There was not biliary calculi. All patients had sphincterotomy performed without complications. It was used Wallstent (8 x80mm or 8 x 60mm). In PS group were left in place 1-4 plastic stents(8.5fr)RESULTS: In all 40 patients, a cholangiogram and successful placement of SEMS or PS was achieved. Endoscopic intervention was 31,5 days (range 23 +/- 46 days) after cholecystectomy in SEMS and 26,3 days (range 21 +/- 37 days) after PS(p:0.82). We find homogeneously sample with the follow distribution: 64% cystic duct , 27% Luschka duct and 9% common bile duct leaks. There were 2 complications in SEMS group and 3 complications in PS group discriminated in: papilla haemorrhage, migration and perforation. Closure of the leak was documented within 7 to 30 days (mean 12 +/- 9,3 days) in all patients. The stents were removed endoscopically following leak closure in 21 days (range 14 +/- 8,5 days) for the SEMS group and 32 days (range 19 +/- 10,4 days) for the PS group(p:0.055). The number of ERCPs required per patient was 1 +/-1,3(range 1-2) in the SEMS stent group and 3 +/- 1,7 (range 1-5) in the PS group(p:0.41). The length of hospitalization was 7,4 days for the metal stent group and 13,9 days for the plastic stent group(p:0.04). Biliary metal stent placement resulted in a significant decrease in hospitalization days. CONCLUSIONS: Our data suggest that the type of stent does not affect the outcome on drainage and closure of postcholecystectomy biliary leaks, but SEMS determine a significant lower days hospitalizations. However, studies are required to confirm the better endoscopic approach in bile leaks due to postcholecystectomy bile duct injury.

T1567

Survival After ERCP for Early Versus Late Liver Transplant Biliary Complications

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 PURPOSE: Biliary complications are significant causes of morbidity and mortality after orthotopic liver transplantation (OLT). The study aim was to compare the survival of patients who underwent ERCP for EARLY (<2 months) versus LATE (>2 months) biliary complications after OLT. METHODS: Retrospective review of endoscopic database and electronic medical record for patients who underwent ERCP for biliary complications after OLT between January 1999 and December 2008. RESULTS: 44 of 351 OLT patients (12.5%) underwent a total of 126 ERCPs. The ERCP findings and survival are shown in the Table. Patients who underwent EARLY ERCP had significantly more anastomotic strictures (AS), while those undergoing LATE ERCPs had significantly more bile duct stones. Patients with AS who had EARLY ERCP had more concomitant bile leaks than LATE ERCP (47% vs 14%, p<0.05) Patients with EARLY ERCP had a higher mortality rate (35.0% vs 8.3% P<0.03) than LATE ERCP. 6 of 7 patients with EARLY ERCP died within 12 months of OLT (sepsis and/or liver failure). The 2 patients in the LATE ERCP group died >1 year after OLT from lung cancer and aspiration pneumonia. There were no deaths attributable to the ERCP procedures. CONCLUSIONS: Patients who require ERCP for biliary complications occurring <2 months after OLT have significantly higher mortality than those undergoing ERCP >2 months after OLT. Mortality in OLT patients with early biliary complications is due to sepsis and/or liver failure, and occurs in the first year after transplant.

Clinical characteristics and survival based on time of presentation in patients with biliary complications

	<2 months (n = 20)	>2 months (n = 24)	P-value
Anastomotic strictures	17/20 (85%)	14/24 (58%)	0.05
Ischemic cholangiopathy	4/20 (20%)	4/24 (17%)	0.78
Bile leaks	11/20 (55%)	7/24 (29%)	0.08
Biliary stones	1/20 (5%)	9/24 (38%)	0.01
Length of f/u (SD)	520.55 (621.9)	827.4 (603.6)	0.11
Mortality	7/20 (35%)	2/24 (8%)	0.03

T1568

Does Operator Fatigability Affect the Procedure Related Outcomes in ERCP?

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 Introduction: Technical success at ERCP is likely to be determined by operator competence, endoscopy unit factors and the technical complexity of the procedure. Operator fatigue, as measured by the number of procedures performed prior to the index case or the duration of the ERCP list may alter an endoscopist's competence, and therefore influence outcome. This study was