†473

SURVIVAL IN PATIENTS WITH MALIGNANT BILIARY OBSTRUCTION TREATED WITH PLASTIC STENTS OR WALLSTENTS. A. Schmassmann, E. v. Gunten, U. Scheurer, H.F. Fehr *, F. Halter. Gastrointestinal Unit, Inselspital, University Hospital, Bern, and * GI Unit, Kantonsspital Aarau, Switzerland.

Background: Despite their high price, self-expanding metal stents of the Wallstent type are of established value in endoscopic treatment of inoperable malignant biliary obstruction. In prospective trials, Wallstents prolonged stent patency, but had no effect on survival. Little information, however, is available on the outcome of patients with stent dysfunction including referral practice and long-term survival. We assessed these parameters during an observation period of 1-5 years.

Methods: All patients from 1990-1993 who received a first permanent stent in the two centers were retrospectively analyzed. Epidemiological data, cumulative stent patency of the 1st, 2nd, and 3rd stent, referral practice, patient survival, and number of ERCPs per patient were assessed according to Kaplan-Meier supplemented with log-rank test.

Results: Patients received 70 plastic stents from 1990-91 and 95 Wallstents from 1992-93. Age, sex, and malignancy (70% pancreatic cancer) were similar in both groups. Median patency of the first stent was increased in the Wallstent group by +6 months (10 vs. 4 months; $P < 0.001$). Stent dysfunction was treated by placing a plastic stent. Stent patency of the second stent was significantly increased by +5 months in the Wallstent group (8 vs. 3 months; $P < 0.05$). Due to the increased patency of stents in the Wallstent group, the number of additional ERCPs per patient was decreased by -38% (20 vs. 58%; $P < 0.01$) and the number of patients dying of untreated stent dysfunction by -21% (30% vs. 9%; $P < 0.05$). Median survival was increased in the Wallstent group by +2.5 months (6.5 vs. 4 months, $P < 0.05$).

Conclusion: In clinical practice, patients with Wallstents have 1) a longer patency of the first and second stent, 2) need less ERCPs, and 3) survive longer, probably due to a lower rate of untreated stent failure.

474

A RARE CASE OF AMPULLARY CARCINOID PRESENTING WITH ACUTE PANCREATITIS - TREATED BY SURGICAL AMPULLECTOMY. M. Shafiuddin, D.K.H. Wong, C. Wesen, and C. K. Ma. Henry Ford Hospital, Detroit, Michigan 48202

A 75 year old black gentleman with past medical history significant for coronary artery disease and hypertension, presented to the emergency room with acute onset epigastric pain, sharp in nature with radiation to the back and right shoulder. Patient denied any history of alcohol abuse, nonsteroidal intake, hematemesis, melena, weight loss or jaundice. On examination his vital signs were found to be stable. There was no scleral icterus. Abdomen was soft, non distended with normal bowel sounds , there was no free fluid, or palpable masses. Electrocardiogram and acute abdominal series were found to be within normal limits. Laboratory examination revealed the following: amylase 1,266 IU/L, lipase 3,375 IU/L, direct bilirubin 0 .6 m/dl, GGT 323 IU/L, SGOT was 297 IU/L an SGPT was 111 IU/L. Ultra sound examination showed a normal gallbladder with nc intrahepatic or extrahepatic ductal dilatation. CT scan of the abdomen revealed a phlegmon involving the pancreatic body and tail with a dilated pancreatic duct. An ERCP was performed which showed a 1.5 cm. smooth lobulated ampullary mass associated with a 13 mm pancreatic duct. An 8 mm sphincterotomy was performed and a 7 French pancreatic stent was placed into the pancreatic duct. Deep forceps biopsies from the ampullary mass revealed a carcinoid tumor. The patient underwent surgical ampullectomy and the margins of the specimen were found to be free of any tumor cells. There was no intra-abdominal lymph node involvement. A review of the literature showed 71 cases of ampullary carcinoid tumor with most presenting as obstructive jaundice. Only 3 cases so far have been reported to present with pancreatitis.

†475

ARE THE PATENCY RATES FOR 10 FRENCH AND 11.5 FRENCH STENTS DIFFERENT FOR COMMON DUCT OBSTRUCTION AND HILAR OBSTRUCTION? RANDOMIZED, PROSPECTIVE STUDY. S. Sherman, G. Lehman, D. Earle, E. Lazaridis, J. Frakes, J. Johanson, D. Howell, W. Parsons, Indiana University Med. Ctr., Indpls., IN; Rockford GE Assoc., Rockford, IL; Maine Med. Ctr., Portland, ME

When used for malignant obstruction of the common duct, expandable metal stents have been shown to have longer patency rates than standard 10 French biliary endoprosthesis (Lancet, 1992;340:1488). The differences in stent patency rates for hilar obstruction are less clear (GI Endosc 1993; 39:310A). We postulated that similar findings would be seen when comparing 10 French and 11.5 French stents. **METHODS:** The study population consists of 134 patients with malignant bile duct obstruction; 30 had hilar and 104 common duct obstruction. Tumor types for the hilar group included bile duct (40%), metastatic (33%), gallbladder (20%), and other (7%). Tumor types for the common duct group included pancreatic (65%), bile duct (19%), metastatic (13%), gallbladder (1%), and other (2%). Following guidewire advancement proximal to the stricture, the patient was randomized to a 10 French or an 11.5 French biliary stent. Patients with hilar and common duct obstruction were randomized separately. Patients were prospectively followed up every 1 to 2 months to assess for symptoms of stent occlusion and to determine the clinical response rate. Stent related interventions and hospital days resulting from stent dysfunction were tallied. The change in total bilirubin between baseline and 30 day post-stenting was compared. The groups were similar with regards to age, tumor type, tumor location, and baseline bilirubin. **RESULTS:**

	Common Duct			Hilar		
	10 F (n=55)	11.5 F (n=49)	P	10 F (n=17)	11.5 F (n=13)	P
Bilirubin Decrease (mg/dl)	7.2	10.1	.08	8.8	9.4	.81
Stent Survival Days	149	370	.14	115	152	.70
Patient Survival Days	120	147	.35	286	184	.73
Stent Related Hosp. Days	1.2	0.7	.37	2.4	3.4	.54
Stent Related Interventions	.48	.37	.56	1.1	1.1	.97

SUMMARY: 1) A trend for improved patency rates was seen for the 11.5 French stent for common duct obstruction. This did not translate into a reduction in the number of stent related interventions and hospital days for stent dysfunction. 2) There was no statistical improvement in the stent patency rates for 11.5 French stents for hilar obstruction. **CONCLUSION:** These preliminary results suggest that larger stents may be more effective for providing longer periods of drainage in common duct obstruction. This study is ongoing.

†476

ENDOSCOPIC PALLIATION OF MALIGNANT BILE DUCT OBSTRUCTION: IMPROVEMENT IN QUALITY OF LIFE. S. Sherman, G. Lehman, D. Earle, E. Lazaridis, J. Frakes, J. Johanson, D. Howell, Indiana University Med. Ctr., Indianapolis, IN; Rockford GE Associates, Rockford, IL; Maine Med. Ctr., Portland, ME

Integration of measures of quality of life (QOL) with economic considerations is critical to define the optimal therapy for patients with malignant bile duct obstruction (MBDO). While endoscopic stenting is clearly indicated for relief of cholangitis or refractory pruritus, its role in patients with jaundice alone, abdominal pain, failure to thrive, etc., is less clear. Endoscopic stenting for these relative indications might be justified if the QOL is significantly improved. The aim of this study was to determine whether endoscopic stenting for MBDO results in an improved QOL. **METHODS:** A modified Functional Assessment of Cancer Therapy (FACT) is the instrument used to assess QOL. This validated, self-administered questionnaire contains 43 items which are divided into the following 5 subscales: physical well-being, social/family well-being, relationship with doctor, emotional well-being, and functional well-being. 53 patients with MBDO filled out the questionnaire prior to biliary stenting and 30 days following stent placement. The results at 30 days were compared to pre-stenting using paired T-tests. **RESULTS:** Endoscopic biliary stenting resulted in a statistically significant improvement in energy levels ($p=.007$), nausea ($p=.006$), feeling of well-being ($p=.009$), time spent in bed ($p=.04$), nervousness ($p<.001$), fear of dying ($p=.01$), acceptance of illness ($p=.01$), sleep ($p=.019$), weight ($p<.001$), diarrhea ($p=.026$), comfort level ($p=.048$), and pruritus ($p=.013$). There are more than 5 times as many significant differences than would be expected by chance alone. In the subset of patients with pancreatic cancer ($n=30$), there was a statistically significant improvement in energy levels ($p=.049$), coping with illness ($p=.03$), nervousness ($p=.01$), fear of dying ($p=.02$), acceptance of illness ($p=.01$), sleep ($p=.003$), QOL ($p=.03$), abdominal cramps ($p=.04$), weight ($p=.002$), aches and pains ($p=.001$), and pruritus ($p=.049$). **SUMMARY:** Endoscopic stenting for MBDO resulted in improvements in physical well-being, emotional well-being and functional well-being. **CONCLUSIONS:** 1) Endoscopic stenting for MBDO (with relative indications for this therapy) appears justifiable based on a significant improvement in QOL. An analysis of the economic considerations of such a recommendation is necessary. 2) Identification of subsets of patients unlikely to have an improved QOL (example: patients unlikely to live > 30 days) is necessary. In the era of economic constraint, these patients should not be considered appropriate candidates for stenting. 3) This study is ongoing.