

minutes. Image quality of CE was rated as good in 94% of the studies. Multiple ulcers were found in the small bowel on CE in 8 patients (47%), 4 of whom had no abnormalities on previous modalities. As such, CE was able to diagnose CD in 4 patients not detected on endoscopy or imaging, including 1 patient with chronic abdominal pain and normal barium follow through and endoscopies. There were no CE-related complications. Conclusions: In our series, 53% of patients with OFG, most of whom did not have any gastrointestinal symptoms, had evidence of CD on at least 1 of 4 diagnostic modalities employed, with CE providing the greatest diagnostic yield. CE is safe and reliable in detecting small bowel ulcers and has a much higher yield than barium follow throughs in patients with OFG. CE should be used in conjunction with endoscopy for the diagnosis of CD in this high prevalence population. With treatment endpoints of mucosal healing increasingly being targeted in clinical studies of CD, these findings are important in therapeutic planning.

### Sa1695

#### Usefulness of the Demarcation Line in Magnified Endoscopy-Combined Narrow Band Imaging for Determining the Expanded Area of Early-Stage Differentiated Gastric Carcinoma

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**Background and Aims:** The usefulness of NBI-combined magnified endoscopy for the diagnosis of differentiated adenocarcinoma has been recognized. Some studies have also reported the usefulness of magnified endoscopy without NBI for evaluating the area of differentiated adenocarcinoma. However, no study has investigated that of NBI-combined magnified endoscopy. We prospectively examined whether NBI-combined magnified endoscopy is useful for evaluating the area of superficial, depressed- or flat-type differentiated adenocarcinoma of the stomach. **Patients and Methods:** This procedure was performed in Saitama Medical University International Medical Center, Japanese Red Cross Kumamoto Hospital and Kitakyushu Municipal Medical Center. The subjects were 31 patients in whom biopsy findings suggested superficial, depressed- or flat-type differentiated adenocarcinoma of the stomach in the above 3 hospitals between January and December 2009. Biopsy was performed on the lesion and non-lesion sides of a boundary (imaginary boundary) visualized on NBI-combined magnified endoscopy. The results were pathologically investigated. We evaluated the accuracy of estimating a demarcation line on NBI-combined magnified endoscopy in comparison with biopsy findings as a gold standard. **Results:** The demarcation line (DL) that could be recognized at 2 points on the orifice and anal sides of each lesion during NBI-combined magnified endoscopy was consistent with the pathological findings in 22 patients with 0-IIc lesions, 7 with 0-IIb lesions, and 2 with 0-IIb+IIc lesions, showing an accuracy of 100%. **Limitations:** The number of patients was limited, and only endoscopists specializing in diagnostic NBI participated in this study. **Conclusions:** The results suggest the usefulness of NBI-combined magnified endoscopy for evaluating the area of superficial, depressed- and flat-type differentiated adenocarcinoma of the stomach (UMIN Clinical Trials Registry identification number C000001769).

### Sa1696

#### The Diagnostic Yield of Capsule Endoscopy and Findings in Patients With Obscure Gastrointestinal Bleeding in a Single Center in Latin America

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**Background:** Capsule endoscopy (CE) has revolutionized the diagnostic evaluation of patients with obscure gastrointestinal bleeding (OGIB) however, the studies are lacking, especially in Latin America. We therefore sought to determine the findings and the diagnostic yield of clinically important findings on CE in patients with OGIB overt and occult. **Methods:** A retrospective and descriptive study was performed, reviewing clinical records in 60 patients with CE study indicating for OGIB, between September 2009 and September 2011, in the Hospital Pablo Tobón Uribe in Medellín-Colombia. The findings in CE were interpreted according to the degree of relevance to the definitive diagnosis of the patient, P0 nothing relevant, P1 less relevant and P2 highly relevant. **Results:** The diagnostic yield of CE in patients with OGIB in our study was 57% (34/60).

There was no significant difference in the presence of significant lesions (P2) between patients with OGIB overt and occult (63% vs 52%, p: 0.49). Complete small bowel visualization was achieved in 92% and in 83% of the CE studies the preparation was adequate. There was no retention of CE in any patient. 26% of bleeding lesions P2 were found outside of the small bowel, three lesions were seen by CE in the colon and six were in the stomach. In relation to the relevant type of lesions P2 found, 47% were vascular, 44% inflammatory/ulcers and 9% small bowel tumors. Lesions in patients with OGIB overt were more vascular, and those with OGIB occult were more inflammatory. There was no significant difference between the diagnostic yield and the timing of CE in relation to bleeding episode in patients with OGIB overt (p: 0.88). Patients with P2 lesions had a higher age compared to those with P1 and P0 lesions, this difference was statistically significant (p: 0.05). In the subgroup of 26 patients with lesions P0 or P1, 17 (65%) received medical treatment and showed no recurrence of iron deficiency anemia or rebleeding, during a median follow-up of 14 months (range 0 to 23 months) post-CE. **Conclusions:** The diagnostic yield of CE in patients with obscure GI bleeding in our study was similar to previous published reports. The most frequently lesions P2 were vascular (angioectasias). Advanced patient age was associated with increased yield on CE in our study. The patients with negative CE had a good prognosis during follow-up.

### Sa1697

#### Validation of Duodenal Endoscopic Submucosal Dissection Compared With Surgical Treatment

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**Background & Aim:** Duodenal endoscopic submucosal dissection (ESD) has recently been applied to the treatment for the superficial duodenal tumor with a minimal risk of regional lymph node metastasis. Although duodenal ESD is expected to replace the surgical treatment in some situations, it is technically difficult and complication rate is high and it is not clear whether or not it is actually less invasive treatment compared with surgical treatment. The aim of this study was to assess the validity of duodenal ESD by comparing the clinical outcomes of duodenal ESD with those of surgical treatment. **Patients & Methods:** From October 2002 to October 2011, patients with superficial duodenal tumors who were treated by ESD or with surgical treatment at the Shizuoka Cancer Center Hospital were reviewed. We retrospectively analyzed 28 lesions including 3 carcinoids and 8 tumors of the ampulla. We divided these lesions into 3 groups according to the treatment procedure (A1: partial duodenal excision, A2: pancreatoduodenectomy, B: ESD). We compared the clinicopathological characteristics and clinical outcomes such as procedure time, complication rate and hospitalization period among 3 groups. **Results:** Patient's characteristics in each group were as follows; The number of the lesions: 4/11/13. Tumor location (1st/2nd/3rd): 0/4/0, 1/10/0, 4/8/1. Median tumor size (range) (mm) : 8 (4-12) / 12 (7-60) / 10.5 (4-20). Clinical outcomes in each group were as follows; Median procedure time (range) (minute): 121 (104-138)/383 (233-636)/51 (26-196). Median hospitalization period (range) (day) : A1/A2/B = 9.5 (7-12)/33 (17-65)/6 (4-71). Major complication in group A1 and A2 was pancreatic fistula. It occurred in 69% (9/15) of surgical cases and 44% (4/9) of the cases with pancreatic fistula were associated with infection. In group B, perforation during ESD occurred in 4 of 13 cases (31%). Delayed perforation occurred in 1 of 13 cases (8%) and postoperative bleeding did not occur. Additional surgeries were necessary after 3 ESD cases. 2 of 3 surgeries were performed by reason of submucosal invasion and 1 of 3 surgeries was performed by reason of peritonitis accompanied by delayed perforation. **Conclusions:** Procedure time and hospitalization period of duodenal ESD were shorter than those of surgical treatment and complication rate of ESD was lower than that of surgical treatment. 80% (4/5) of the ESD-related complications were managed conservatively. Although the clinical outcomes of duodenal ESD need to be improved, it was considered as less invasive and appropriate treatment for superficial duodenal tumors.

### Sa1698

#### Efficacy and Safety of Double Balloon Enteroscopy (DBE) for the Management of Hamartomatous Polyposis Syndromes (HPS)

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**Background:** HPS are a group of inherited disorders which include Peutz-Jeghers syndrome (PJS), juvenile polyposis syndrome (JPS) and Cowden syndrome (CS). Small bowel (SB) polyposis is a manifestation of HPS and DBE-assisted polypectomy may obviate repeated SB surgeries for polyp intussusception, obstruction, or bleeding. **Aim:** To assess the efficacy and safety of DBE-assisted polypectomy in HPS patients with clinically significant SB polyposis. **Methods:** All HPS patients who underwent DBE from 01/2007-09/2011 were identified using a prospectively maintained DBE database. DBE was performed by four