For every item a score has been attributed on a scale from 1 (best performance) to 4 (worst performance); they have been summed for the 6 procedures of every operator and subsequently for the entire group.
Statistical analysis to compare the three groups in each of the 5 considered items has been performed by means of Wilcoxon test for 2 independent samples and by means of Kruskal-Wallis test for 3 independent samples ($p<0.05$).
Results: 17 operators have been studied:

- 7 endoscopy assistants/naïve students (4 F/3 M)
- 5 junior doctors (3 F/2 M)
- 5 senior doctors (1 F/4 M)

Statistically significant differences were observed as regards time to reach the caecum and induction of severe/extreme pain, both with Kruskal-Wallis 3 samples test and with Wilcoxon 2 samples test when comparing experts and naïve operators; all other comparisons did not reach statistical significance.
Conclusions: These results suggest that junior doctors and naïve operators can perform reasonably well in simulated diagnostic colonoscopy, provided that a careful training has been offered and expert assistance has been made available during the procedure.
Speed of advancement and avoidance of severe/extreme pain appear to be the most critical areas to teach.

P.01.9

TREATMENT OF COLONIC OBSTRUCTION WITH THE COOK EVOLUTION® COLONIC STENT SYSTEM

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Background and aim: Recently, controversial results have been reported regarding use of metal stents to treat patients with malignant colonic obstruction. The aim of this study was to evaluate technical and clinical success and safety of the Cook Evolution® Colonic Stent System either as a palliative measure or as a bridge to surgery in patients with malignant colorectal obstruction.
Material and methods: Prospective data were collected using a web-based registry. The primary endpoint was clinical success, defined as relief of colonic obstruction. Secondary endpoints included technical success, implant duration, symptoms at follow-up and complications.
Results: In total, 80 patients (44 men) with a median age of 74 years (range 20 - 80) were enrolled in the study. Most strictures were located in the descending (17.5%), sigmoid (30.0%), or recto-sigmoid colon (28.8%). In the palliation group, 47 stents were deployed in 44 patients. The technical success was 93.9% (46/49). In the bridge to surgery group, 36 stents were deployed in 35 patients. The technical success was 86.1% (31/36). In the palliation group, clinical success was 97.8% (44/45). In the bridge to surgery group, 5 patients did not have immediate relief of obstruction, giving a clinical success of 85.7% (30/35). In the palliation group, 3 perforations (6.7%), 1 migration (2.2%) and 3 obstructions (6.7%) occurred, and in the bridge to surgery group, 3 perforations (8.6%) and 5 migrations (14.3%) occurred. The overall perforation rate was 7.5%. One palliation group patient experienced a diastatic perforation, and one bridge to surgery group patient experienced a perforation after chemotherapy. Overall average length of implantation was 97.5 days for palliation group patients and 19.9 days for bridge to surgery group patients. During the study, 16 patients in the palliation group and 1 patient in the bridge to surgery group died with the stent still in place; no deaths were considered to be caused by a device complication.
Conclusions: Evolution Colonic Stent placement was safe and effective for both palliation of symptoms and as a bridge to surgery in patients with colonic obstruction or strictures due to malignancy. Clinical success and complication rates were similar to those reported in the published literature.

P.01.10

APPROPRIATENESS BASED REQUEST FORM FOR DIGESTIVE ENDOSCOPY: RESULTS OF A SINGLE CENTRE EXPERIENCE

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Background and aim: Application of appropriate indications for digestive endoscopy (DE) should conserve limited resources, increases relevant findings rate and decreases waiting lists for endoscopic procedures. Official guidelines for the appropriate use of digestive endoscopy have been proposed by the American Society for Gastrointestinal Endoscopy (ASGE) and by the European Panel on the Appropriateness of Gastrointestinal Endoscopy in order to optimize the use of finite resources in an open-access system by increase the appropriateness of DE.
Aim of the study was to evaluate the appropriateness of DEs using a request form based on the appropriate upper and lower endoscopy ASGE indications.
Material and methods: During a six month period all consecutive endoscopies of inpatients (training series) were appointed using a request form based on the appropriate upper and lower endoscopy ASGE indications. Rates of global appropriateness, negative endoscopies and relevant findings were evaluated. Relevant findings were considered overt bleeding, ulcers, polyps, features of inflammatory bowel disease, gastroesophageal varices and cancer. Results were compared with findings and indications of endoscopies (control series) previously performed in the same hospital without request form.
Results: 549 patients (319M/230F), age 65±13 years, underwent 368 upper and 181 lower endoscopies. 4.7% (n=17) of upper and 5.6% (n=10) of lower endoscopies were considered inappropriate because the request does not meet any indication considered appropriate by ASGE guidelines. All these endoscopies resulted negative. Only 5% of training versus 27% of control group pooled endoscopies were considered inappropriate ($p<0.001$). 28% (n=153) of training series pooled endoscopies versus 16.7% (n=10) of control series showed a relevant finding ($p=0.05$). Relevant findings were higher in the training series than in the control series at either higher (24.4% vs 13%) and lower (34.8 vs 23%) endoscopy.
Conclusions: The use of an appropriateness request form for DE based on ASGE indications reduced inappropriate endoscopies and enhanced relevant findings rate.

P.01.11

A RANDOMIZED CONTROLLED TRIAL COMPARING THE EFFICACY AND ACCEPTABILITY OF SODIUM PICOSULPHATE/MAGNESIUM CITRATE (CITRAFLEET®) WITH LOW-VOLUME PEG-ASCORBIC ACID (MOVIPREP®) AS PREPARATION FOR COLONOSCOPY

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Background and aim: Adequate preparation is essential for effective colonoscopy. Acceptance of preparation affects the degree of cleansing. Objective of the study is to compare the degree of colon obtained by Citrafleet® and Moviprep®, and identify predictors of poor preparation.
Material and methods: In this single-blind, multicenter, randomized study, patients undergoing colonoscopy were randomly assigned to receive either Moviprep or Citrafleet. Demographic and clinical characteristic of patients were recorded. Degree of cleansing was reported according to Boston scale. In addition, a questionnaire regarding patient acceptance, as well as preparation-related adverse events, was administered immediately before examination.
Results: 285 patients were included. Adequate cleansing was achieved in 75.7% in Citrafleet and 76.5% in Moviprep group (NS). Boston score and right colon score were similar in the two groups. Tolerability was significantly better for Citrafleet (10% vs 41% of patients reported unpleasant preparation, $p=0.0001$); 98% of Citrafleet vs 84% of Moviprep patients ($p<0.0001$) expressed willingness of repeating the same preparation. Palatability was better

with Citrafleet (P<0.01), while symptoms related to preparation (fullness, belching, nausea and vomiting) occurred more frequently with Moviprep (P<0.01). Regardless of preparation, the split-dosage regimen was associated with better cleansing (OR 3.4, P=0.033). Other independent predictors of poor cleansing were presence of comorbidity (OR 2.5, P=0.005), occurrence of symptoms during preparation (OR 3.3, P=0.001), and incomplete (<75%) preparation (OR 16.3, P=0.011). Inadequate cleansing affected both cecal intubation rate (90.4% vs 99.1%, P=0.0028) and cecal intubation time (9.54±4.57 min vs 8.2±4.32, P=0.0028).
Conclusions: Citrafleet and Moviprep are both effective low-volume preparations, but Citrafleet has higher palatability and is better tolerated. A split-dosage schedule is the most effective method. Low tolerability and incomplete assumption of the agent are likely to negatively affect quality of preparation.

P.01.12

PROSPECTIVE EVALUATION ON THE PREVALENCE OF SERRATED ADENOMAS DURING A TWO-YEAR PERIOD IN AN ITALIAN ENDOSCOPY CENTRE

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Background and aim: Serrated adenomas (SAs) are characterized by a distinctive histological appearance which gives them a serrated aspect and non-branching narrow profile to the crypts of Lieberkuhn. It is well known that colorectal cancer lesions can derivate from SAs; however, it is difficult to differentiate them from hyperplasic polyps, which have a similar serrated histological aspect and do not have the same neoplastic risk. Our aim was to assess prospectively the prevalence of serrated adenomas in all patients who have undergone endoscopic polypectomy in our centre between January 2009 and December 2010.
Material and methods: An expert pathologist evaluated a total of 2294 polypectomies performed in the selected time interval. and classified them on the basis of the histological type, localization, diameter and presence of dysplasia.
Results: We found out 1681 (73%) 'conventional' (i.e. non-serrated) adenomas, and 612 (27%) serrated lesions which were subdivided in 545 (89%) hyperplastic polyps (HP) and 67 (11%) serrated adenomas [37 SSAs (55%), 29 traditional serrated adenomas or TSAs (43%) and 1 mixed hyperplastic adenomatous polyp (2%)]. Thirty-seven (55%) SAs were localized in the left colon (distally from the splenic flexure), while 30 (45%) were found in the right colon; rectum was the most involved tract (30%), followed by sigmoid colon (19%) and caecum (15%). All the TSAs presented low-grade dysplasia; high-grade dysplasia was found only in the mixed polyp; no carcinomatous foci were found in all SAs. No statistical difference was found between size of lesions and/or colic site and presence of dysplasia.
Conclusions: Serrated lesions are common in routine endoscopy practice and a certain grade of dysplasia is highly represented in TSAs. As recent studies indicate that up to 20% of colorectal cancer lesions derive from SAs, we thing that the creation of a standardized clinical-therapeutic approach to patients with these lesions is necessary.

P.01.13

DOES GENDER INFLUENCE UPPER GASTROINTESTINAL SYMPTOMS AND ENDOSCOPIC DIAGNOSIS?

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Background and aim: Gender distribution for gastrointestinal symptoms and disease is described, indeed irritable bowel syndrome (IBS), constipation, and bloating are more prevalent in women than men, but gender differences associated with dyspepsia are inconsistent. The aim of this study was to determine gender differences in the prevalence of gastrointestinal symptoms and endoscopic diagnosis in subjects that performed esophagogastroduodenoscopy (EGD).
Material and methods: A total of 825 outpatient subjects (376 men and 449 women), age (men: median age 51 years, range 19-88; women: median age 51.5 years, range 17-83) were admitted to our Endoscopy Unit in 2009-2010 to perform an EGD because of various reasons. P values <0.05 were considered statistically significant.
Results: The indicators to perform EGD were: epigastric pain (23.4% M and 28% F; p=0.128), dyspepsia (9.3% M and 6.9% F; p=0.205), symptoms of gastroesophageal reflux disease (9.8% M and 12.2% F; p=0.274), anaemia (3.7% M and 13.1% F; p=0.000), follow up for gastric cancer (8.8% M and 6.9% F; p=0.317), other symptoms (nausea, vomiting, weight loss; 22.9% M and 18.7%; p=0.141). The endoscopic diagnosis was: gastropathy (85.1% M, 93% F; p=0.000), cardia incontinence (19.7% M, 19.4% F; p=0.912), esophagitis (19.9% M, 13.8% F; p=0.018), peptic ulcer (10.1% M, 2.7% F; p=0.0000), duodenopathy (9.8% M, 8.5% F; p=0.493), hiatal hernia (17.3% M, 18.7% F; p=0.597), gastric cancer (1.9% M, 1.1% F; p=0.371), esophageal cancer (0.8% M, 0.4% F, p=0.516), vascular lesions (0.8% M, 0.4% F; p=0.320).
Conclusions: Anaemia as indicator to perform EGD was significantly more prevalent in male than in female.
At endoscopy gastropathy, esophagitis and peptic ulcer were significantly more prevalent in male than in female.

P.01.14

ENDOSCOPIC TREATMENT OF UPPER GASTROINTESTINAL POST-SURGICAL LEAKS BY MEANS OF SELF EXPANDING METAL STENT: REPORT OF 8 CASES

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Background and aim: Post-surgical leaks of the upper GI tract are usually treated surgically. SEMS represents a valuable alternative to surgery since relatively easy, effective and safe. We report our experience in the use of SEMS in the management of post-surgical upper GI leaks.
Material and methods: Over 3 years, we observed 8 patients with post-surgical upper GI leaks: 4 after sleeve gastrectomy; one after oesophagectomy; one after gastrectomy; one after fundoplicatio; one after cardiac surgery. All were treated with endoscopic SEMS. Stent removal was planned in all cases within 6 weeks after implantation.
Results: Eleven stents were placed in 8 patients. Stenting determined coverage of the leak in all patients but one because of early migration. Overall, stent migration was observed in 5 patients. The leak was totally sealed in 7 patients. One patient died after second surgery; another was operated to close the leak. Two patients underwent thoracoscopy thorough the anastomotic dehiscence with endoscopic cavity drainage and disinfection. Stent removal was performed between 2 and 43 days and was uneventful in all cases.
Conclusions: SEMS is a safe and feasible alternative to surgery in patients with post-surgical leaks, but some critical points have to be considered: stent migration rate is high; stent should be timely removed to reduce complications; secondary infections should be treated thoroughly by means of percutaneous or endoscopic drainage.

P.01.15

COLONOSCOPY IN VERY OLD HOSPITALIZED PATIENTS: PROSPECTIVE STUDY

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Background and aim: Data from literature support the use of colonoscopy for diagnosis and treatment of findings in elderly patients presenting with symptoms; data about colonoscopy in very old people performed in the