

## 1096 Are Random Biopsies Still Useful for the Detection of Intraepithelial Neoplasia in IBD Patients Undergoing Surveillance Colonoscopy With Chromoendoscopy?

Driffa Moussata, Matthieu Allez, Dominique Cazals-Hatem, Yoram Bouhnik, Philippe Bertheau, David Laharie, Jean-Marc Gornet, Anne Lavergne-Slove, Arnaud Bourreille, Hedia Bixi, Eric Fort, Jean-Marie Reimund, Carmen Stefanescu, Julien Branche, AnneLaure Pelletier, Philippe R. Marteau, Jacques Moreau, Marion Simon, Isabelle NionLarmurier, Franck Carbonnel, Jean-Francois Flejou, Françoise Berger, Bernard Flourie and the GETAID.

**BACKGROUND/AIM:** Colonoscopy with panchromoendoscopy (CE) is superior to standard colonoscopy in detecting intraepithelial neoplasia (IEN) in patients with IBD. Whether there is still a need for random biopsies in unsuspecting mucosa after CE is controversial and recent guidelines recommend to perform random biopsies only if CE is not used. The aim of this study was to evaluate the performance of random biopsies in addition to the targeted biopsies of CE-visible lesions for the detection of IEN.

**METHODS:** All patients with clinically quiescent IBD participating in an endoscopic program for detection of IEN using CE were prospectively included at 17 academic departments of Gastroenterology. All patients underwent complete colonoscopy according to a standardized procedure: on withdrawal, each 10 cm colonic segment was sprayed using 0.25% indigo carmine and all suspected lesions were classified according to Paris criteria and targeted biopsies or endoscopic resection were performed. In addition, 2 to 4 quadrant random biopsies were then obtained every 10 cm from normal appearing mucosa according to standard guidelines. Histological slides with a suspicion of IEN were reviewed jointly by a panel of 5 expert GI pathologists in order to obtain a common diagnosis and to refrain from use of the indefinite dysplasia category.

**RESULTS:** 900 colonoscopies were performed in 900 patients (478 F/422 M, mean age ( $\pm$  SD):  $46 \pm 14$  yrs, mean disease duration:  $17 \pm 8$  yrs). There were 369 (41 %) subjects with ulcerative colitis, 424 (47 %) with Crohn's colitis (involving at least 1/3 of colon) and 107 (12 %) with indeterminate colitis. Main results are reported in the Table. In 75 patients IEN/CRC was detected by only targeted biopsies from polypoid lesion or flat elevation, in 9 by only random biopsies and in 9 by both targeted and random biopsies.

**CONCLUSIONS:** In this study, a special care was taken to follow classic and recent guidelines and to review biopsies by GI pathologists with extensive experience in the field of IEN. Although yield of additional systematic random biopsies is low, they allow to detect IEN, which were missed by targeted biopsies guided by chromoendoscopy, in 1 % of patients of this large series (900 patients). Follow up is however required to determine the impact of IEN found by random biopsies on care of IBD patients.

Total number of biopsies and number of patients with IEN/Colorectal Cancer

Biopsies	Total number of biopsies	Mean number of biopsies/colonoscopy (range)	Number of patients with IEN/Colorectal Cancer (%)
Targeted biopsies	4188	4.7 (0-53)	75 (8.3%)
Random biopsies	27956	31.1 (14-80)	9 (1%)