SUMMARY OF THESIS*

HISTOLOGIC STUDY OF COLONIC MUCOSA IN PATIENTS WITH CHRONIC DIARRHEA AND NORMAL COLONOSCOPIC FINDINGS

Multiple colonic biopsies during colonoscopy with normal findings in patients with chronic diarrhea are not a consensus. Although it does not significantly raise the morbidity of the procedure, it can increase the length and the cost of colonoscopy. The aims of this study were: first, to determine the histologic abnormalities in macroscopically normal mucosa of terminal ileum and colon in patients with chronic diarrhea; second, to find out the diagnostic yield of colonoscopy with ileoscopy and multiple biopsies in investigation of these patients; third, to learn the anatomic distribution of these histopathologic lesions along terminal ileum and colon and, finally, to appraise whether a reotosigmoidoscopy rather than colonoscopy could be recommended as the initial colonic endoscopic procedure for these patients. One hundred and seventy patients with normal colonoscopy were included. Five had no symptoms and colonoscopy was performed for the investigation of family history of colon cancer. One hundred and sixty five had chronic diarrhea and of these three were excluded, two with inadequate material for histologic study and one had human immunodeficiency virus. Multiple biopsies of terminal ileum, ascending colon, transverse colon, descending colon, sigmoid colon and rectum were taken during the colonoscopy. The same pathologist reviewed each biopsy specimen after hematoxylin-eosin staining. Special stains were done in cases with suspicion of collagenous colitis (PAS, Masson’s trichrome and immunohistochemistry for tenasin), in lymphocytic colitis and in five patients without diarrhea (immunohistochemistry for tenasin) and intestinal spirochetosis (immunohistochemistry). The five patients without symptoms had no histologic abnormalities. The findings in other 162 patients were: normal histology in 51 (31.5%), microscopic colitis not otherwise specified in 37 (22.8%) and histologic abnormalities in 74 patients (45.7%). These histologic changes were: granulomas in 22 patients (13.6%), collagenous microscopic colitis in 19 (11.7%), lymphocytic microscopic colitis in 12 (7.4%), minimal change microscopic colitis in 12 (7.4%), eosinophilic colitis in two (1.2%), pericrypt eosinophilic enterocolitis in two (1.2%), melanosis coli in two (1.2%), intestinal spirochetosis in one (0.6%), schistosomiasis in one (0.6%) and Crohn’s disease in one patient (0.6%). In the group with collagenous and lymphocytic microscopic colitis there were 10 (6.3%) and five (3.1%) patients that showed, respectively, borderline histologic abnormalities of each kind of colitis. The histologic findings in 162 patients with chronic diarrhea were arranged in agreement with their clinical and diagnostic importance. Three groups were found. One, with no significance, included 110 patients (67.9%) with normal histology, microscopic colitis not otherwise specified and isolated granulomas. Another group of 17 (10.5%) patients had findings of borderline significance, including possible collagenous colitis, some features of lymphocytic colitis and melanosis coli. A third group consisting of the remaining 35 (21.6%) patients had clinically and diagnostic significant histologic findings. An assessment of these 52 patients with possible diagnostic histologic abnormalities could have been made from biopsies of the distal colon (sigmoid or rectum) in 43 patients (82.7%), but, in the remaining nine patients (17.3%), the diagnosis was done only with a proximal study (ascending, transverse or descending colon). Terminal ileum studies did not reach a diagnosis in neither of them. Seventy-three patients (45.1%) with chronic diarrhea fulfilled the Rome II criteria for irritable bowel syndrome. Of these, 19 (26.0%) had some clinical and diagnostic significant histologic changes, and 15.8% of these findings were seen only in the proximal colon. Final diagnosis established by the follow-up of the 22 granuloma patients was obtained in 15 patients (68.2%), that were: irritable bowel syndrome in nine (40.9%), inespecific ulcerative colitis in two (9.1%), intestinal parasitosis in two (9.1%) and Crohn’s disease in two (9.1%). In conclusion, important histologic lesions, with possible clinical and diagnostic yield, could exist in significant percentage (32.1%) of chronic diarrhea patients with normal colonoscopic findings, which can justify routine mucosa biopsies. In some of them (21.6%) this yield was unquestionable, in some (10.5%), like possible collagenous colitis or some features of lymphocytic colitis and melanosis coli, it needs to be determined by careful follow-up studies. The distribution of these histologic changes showed the importance of studying all colon segments and not only the reotosigmoid area. The histopathologic study of terminal ileum did not concur for the final diagnosis in this kind of patient. Patients with collagenous and lymphocytic microscopic colitis showed demographic data similar to other studies.

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