

CAMPYLOBACTER PYLORI CAN COLONIZE THE RECTUM IF HETEROTOPIC GASTRIC TISSUE IS PRESENT. K.R. Dye, B.J. Marshall, D.J. Pambianco, H.F. Frierson, R.W. McCallum. Department of Internal Medicine, University of Virginia, Charlottesville, Va. 22908.

In addition to its common location in the stomach, *C. pylori* has been seen in heterotopic tissue in the esophagus and in islands of gastric metaplasia in the duodenum. It has never before been seen distal to the duodenum.

A 35 y.o. white female underwent colonoscopy for evaluation of weight loss and abdominal pain. The exam revealed a 1 cm clump of pale tissue 10 cm from the anus. Histology showed body-type gastric mucosa with parietal cells, glands and overlying mucus secreting epithelium. Histology showed junctional areas of gastric and normal rectal mucosa. An active chronic inflammatory reaction was present in the gastric mucosa but the adjacent rectal mucosa was normal. Large numbers of curved bacteria, with identical morphology to *Campylobacter pylori* were seen adhering to the gastric-type tissue but not to the rectal epithelium. Upon repeat exam, the lesion was strongly positive for urease (CLOtest), whereas the nearby rectal mucosa was urease negative at 3 hours. Electron microscopy confirmed the presence of *C. pylori*.

The presence of *C. pylori* on heterotopic gastric mucosa in the rectum emphasizes the organism's ability to selectively colonize the gastric epithelial cell. Although *C. pylori* has never been cultured from feces, this case suggests that viable *C. pylori* organisms may reach the rectum and that fecal-oral contamination is a possible route of infection.

PSYCHOSOCIAL FACTORS IN THE IRRITABLE BOWEL SYNDROME: A MULTIVARIATE STUDY OF PATIENTS AND NONPATIENTS WITH IBS. Douglas Drossman, M.D., Daphne McKee, Ph.D., Robert Sandler, M.D., Madeline Mitchell, M.U.R.P., Elliot Cramer, Ph.D., Betsy Lowman, Ph.D., Amy Burger, M.A., University of North Carolina, Chapel Hill, NC.

In this multivariate analysis of the irritable bowel syndrome (IBS) we describe the symptomatic and psychological features of the condition and their possible contributions to health care seeking. We studied 72 IBS patients, 82 persons with IBS who had not sought medical treatment and 84 normals. All subjects received complete medical evaluation, diary card assessment of abdominal pain and stool habit, and standard psychological tests of pain, personality, mood, stressful life events, illness behavior and social support.

Pain and diarrhea were the most important symptoms associated with patient status. When controlling for these symptoms we found that: 1) IBS patients have a higher proportion of abnormal personality patterns, greater illness behaviors and lower positive stressful life event scores than IBS nonpatients ($p < .001$) and normals ($p < .001$). 2) IBS nonpatients, while psychologically intermediate between patients and normals, are not different from normals ($p < .21$); and 3) IBS nonpatients have higher coping capabilities, experience illness as less disruptive to life, and tend to exhibit less psychological denial than patients. These factors may contribute to "wellness behaviors" among people with chronic bowel symptoms.

We conclude that the psychologic factors previously attributed to the IBS are associated with patient status rather than to the disorder per se. These factors may interact with physiological disturbances in the bowel to determine how the illness is experienced and acted upon.

CLINICAL EXPERIENCE WITH VERY LOW CALORIE (VLC) DIETS FOR HYPOALIMENTATION OF OBESE PATIENTS. Martin H. Floch, M.D., F.A.C.G., Barbara Burgess, C.S.W., Lisa Weston, R.D., Nancy Cooper, R.N. and Betsy Taylor, R.D., Norwalk, CT.

A combination of VLC diet and behavior modification is the preferred treatment of moderate and morbid obesity. VLC diets are a form of hypoalimentation using a balanced enteral feeding. At the time of this abstract submission we have started 106 patients in a program consisting of a core VLC 12-week period followed by continued VLC or maintenance if goal weight (wt) was reached, and weekly group meetings. 80 (75%) patients, 24 males and 60 females, successfully completed the 12-week core. 15 started with a Body Mass Index (BMI) of >42 , 46 with a BMI between 32-41, 20 between 28-31, and 2 at 25-27. The range of wt. loss for females at 12 weeks was 15 lb to 58 lb with a mean of $33 \text{ lb} \pm 12 \text{ lb}$, for males it was 25 lb to 109 lb with a mean of $47 \text{ lb} \pm 19 \text{ lb}$. Maximal wt. loss for a female was 88 lb at 31 weeks, and for a male was 179 lb at 28 weeks.

Serum cholesterol for females at onset was 236 ± 50 and 201 ± 47 at 12 weeks. For males it was 244 ± 50 at onset and 184 ± 37 at week 12. Female hemoglobin was 13.9 ± 0.9 at onset and 13.6 ± 1.1 at 12 weeks. Two patients developed cholecystitis, one transient foot drop, and no other significant complications occurred in 10 months of observation. 49 (46%) continue to lose wt., 12 (11%) are in maintenance, 20 (19%) have reached goal wt. We conclude that VLC diets are an easy and safe method to lose large amounts of wt. The long-term effect of the behavior modification remains to be evaluated.

ANTIGEN EXPRESSION IN INFLAMMATORY BOWEL DISEASE AND ASSOCIATED CANCER. O. Froymovich, MD, M. Shafir, MD, FAGC, J. Strauchen, MD, A. Greenstein, MD, FAGC, T. Heimann, MD, FAGC, A. Sugita, MD. The Mount Sinai Medical Center, New York, New York.

Patterns of expression of Ca 19-9 Antigen and polyclonal CEA have been studied in patients with inflammatory bowel disease with the purpose of correlating the appearance of these antigens with the progression of nonneoplastic inflammatory bowel disease mucosa to malignancy. Materials consisted of 48 formalin fixed paraffin imbedded colon specimens of patients with ulcerative colitis with dysplasia, ulcerative colitis with dysplasia, ulcerative colitis and carcinoma, Crohn's disease colorectal adenocarcinoma without history of ulcerative colitis, and diverticulitis. Segments of normal colonic mucosa in a patient with diverticulitis and normal small bowel specimens were used as negative controls. Avidin-biotin immunoperoxidase staining technique using Ca 19-9 primary monoclonal antibodies and polyclonal CEA antiserum was performed. The results of staining were recorded both quantitatively (amount of tissue stained) and qualitatively (color intensity). Comparison of the following types of mucosa via unpaired t test showed no significant difference with respect to the amount and the intensity of staining for Ca 19-9 Antigen and CEA: ulcerative colitis and dysplasia, Crohn's disease and ulcerative colitis without dysplasia. The staining was significantly more intense for CEA in adenocarcinoma specimens without ulcerative colitis than in those with ($p < 0.02$). The difference in quantitative staining in the same types of mucosa was not significant. Inflammatory atypia within glands more so than dysplasia appears to influence positive staining for Ca 19-9. The mucosa of diverticulitis specimens as well as that of negative controls demonstrated either minimal or no staining for Ca 19-9 but stronger staining for CEA. Our results demonstrate no apparent predictive value of Ca 19-9 Antigen and CEA in routine screening of ulcerative colitis patients for the development of malignancy. Clinical correlation with immunohistochemical results is in progress.