

Studies Link IBD to Other Inflammatory Diseases

An increased prevalence of asthma, arthritis, and psoriasis, among other conditions, was observed.

BY DOUG BRUNK
San Diego Bureau

Inflammatory bowel disease is likely to be associated with other chronic inflammatory disorders, results from two recent population-based studies have found.

Investigators observed an increased prevalence of asthma, arthritis, chronic renal disease, multiple sclerosis, and psoriasis, among other conditions, in patients with IBD, compared with population controls.

The findings "remind us that the effects of IBD extend to every corner of the body, including the lung and the central nervous system," Edward V. Loftus Jr., M.D., of the division of gastroenterology and hepatology at Mayo Clinic College of Medicine, Rochester, Minn., wrote in an editorial about the studies (*Gastroenterology* 2005;129:1117-20). They "lend credence to the emerging concept that patients with

one immune-mediated condition are more likely than the general population to have another autoimmune disease."

In the larger of the two studies, Gauree Gupta, M.D., and associates at the University of Pennsylvania, Philadelphia, identified 20,173 patients from the United Kingdom's General Practice Research Database diagnosed with Crohn's disease and ulcerative colitis between January 1988 and October 1997.

Each patient was randomly matched for age, gender, and primary care practice to 4 controls, which amounted to 80,666 controls (*Gastroenterology* 2005;129:819-26.)

On cross-sectional analysis, the investigators found that the relative odds of a diagnosis of multiple sclerosis, demyelina-

tion, and/or optic neuritis in patients with Crohn's disease and ulcerative colitis as compared with their matched controls was 1.54 and 1.75, respectively.

"These observations are important to confirm the previously hypothesized association of IBD and demyelinating disorders," the investigators wrote. They are also "essential to help place into context reports of the onset or exacerbation of de-

myelinating disorders in patients taking anti-TNF α therapies for conditions such as rheumatoid arthritis, psoriasis, and IBD."

In a similar study led by Charles N. Bernstein, M.D., of the University of Manitoba, Winnipeg,

investigators set out to determine the relationship between IBD and common respiratory and neurologic diseases. They analyzed data from the University of Manitoba IBD database, which included 8,072 patients diagnosed with IBD between 1984 and 2003 (*Gastroenterology* 2005;129:827-

36). Each patient was randomly matched for age, gender, and geographic location to 10 people in the general population.

Compared with controls, Crohn's disease and ulcerative colitis patients were significantly more likely to have arthritis, asthma, bronchitis, psoriasis, and pericarditis. The investigators also observed an increased risk for chronic renal disease and multiple sclerosis among ulcer patients but not Crohn's disease patients, while arthritis and asthma ranked as the most common nonintestinal comorbidities.

Dr. Bernstein and his associates wrote that the "link between these diseases and IBD may stimulate research pursuing the link of these organ systems on an immune basis. More practically, these data reinforce that respiratory complaints in patients with IBD should be taken seriously and, at the least, standard pulmonary function tests should be performed. However, routine pulmonary function testing cannot be recommended at this time."

The study was partially supported by the Crohn's and Colitis Foundation of Canada and the Canadian Institutes of Health Research. ■

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Aspirin, Exercise May Protect Against Colon Ca Recurrence

BY JANE SALODOF MACNEIL
Southwest Bureau

ORLANDO — Intriguing data from a prospective colon cancer trial suggest that aspirin and exercise might help protect survivors from recurrence of the disease.

Only 75 patients (8.9%) in the 846-patient trial reported regular aspirin use; the dosages ranged from 81 mg to 325 mg per day. At an average follow-up of 2.7 years after completion of treatment, their risk of recurrence and death was reduced by more than 50%, compared with patients who were occasional users.

A second analysis from the same trial found that the equivalent of walking an hour a day, 6 days a week, was associated with a 40%-50% reduction in risk over the same time period. "The [disease-free survival] hazard ratio of 0.55 is as strong an effect as seen for adjuvant chemotherapy as compared to observation," the investigators noted.

Based on these findings, Jeffrey A. Meyerhardt, M.D., Ph.D., and his coinvestigators are urging further study of the potential of lifestyle changes to improve outcomes in colorectal cancer.

"Primary care doctors are going to see increasing numbers of cancer survivors, and we need to understand, we all need to understand, other things people can do once they are through with their treatment," Dr. Meyerhardt said in an interview at the annual meeting of the American Society of Clinical Oncology.

Dr. Meyerhardt, an oncologist at the Dana-Farber Cancer Institute in Boston, presented two posters reporting the data on behalf of investigators from the multicen-

ter Cancer and Leukemia Group B (CALGB) trial.

The prospective study assessed postoperative adjuvant chemotherapy regimens in stage 3 colon cancer patients.

Charles Fuchs, M.D., a professor of medicine at Dana-Farber, led the aspirin analysis, which was based on surveys conducted midway through and 6 months after adjuvant chemotherapy. About 830 patients completed both surveys.

The investigators also found a trend toward lower risk of recurrence in patients who reported using cyclooxygenase-2 inhibitors. Just 41 patients (4.7%) used rofecoxib or celecoxib. No benefit was documented for patients taking acetaminophen.

The physical activity data came from the survey conducted 6 months after completion of adjuvant chemotherapy. It excluded patients who had a recurrence or died within 3 months of the physical activity measurement.

The 832-patient physical activity study involved collection of information on a range of activities, which were assigned metabolic equivalent (MET) conversion scores for every hour reported. For example, walking at a normal pace for an hour was scored at 3. Bicycling for the same time period received 7 points.

The investigators concluded that the "protective effect was most apparent in patients engaging in at least 18 total MET-hours per week," which they interpreted as the equivalent of walking 1 hour per day, 6 days a week.

Stratification by age, gender, baseline performance status, body mass index, and number of positive nodes did not alter the consistency of the results. ■

Antibiotic Prophylaxis Cuts Infections After Colon Surgery

BY MITCHEL L. ZOLER
Philadelphia Bureau

PHILADELPHIA — Antibiotic prophylaxis "absolutely, positively" lowers the risk of wound infection in patients undergoing elective colon and rectal surgery, Richard L. Nelson, M.D., said at the annual meeting of the American Society of Colon and Rectal Surgeons.

"It's unethical to do an operation in the abdomen or open colon without antibiotic prophylaxis," he said, based on the results of a metaanalysis of 103 randomized, controlled trials of antibiotic prophylaxis that were published during 1980-2004. The studies all involved abdominal, colorectal surgery, and the primary end point of the studies was the incidence of abdominal surgical wound infections.

The literature search done by Dr. Nelson and his associates initially identified 180 published reports of randomized, controlled trials that assessed the efficacy of antibiotic prophylaxis. The studies involved 49 different antibiotics and nearly 30,000 patients. The investigators eliminated 77 of the studies from the analysis because they included too many variables that produced results that could not be evaluated, leaving 103 studies included in the final analysis.

The metaanalysis documented several other conclusions about antibiotic pro-

phylaxis, said Dr. Nelson, chief of the division of colon and rectal surgery at the University of Illinois Medical Center in Chicago:

► Virtually any antibiotic will work, but prophylaxis is most effective if it covers both aerobic and anaerobic species. Compared with placebo, aerobic coverage cut the risk of wound infection by 59%, and drugs effective against anaerobic species reduced wound infections by 45%.

► Adequate prophylaxis is achieved with a single dose that's administered within 2 hours of the start of surgery. Additional antibiotic doses confer no additional protection regardless of how long the surgery takes. In the metaanalysis, 18 studies compared one dose against more than one, and the two strategies produced virtually identical wound infection rates.

Despite this, in the 103 studies, 45% of patients received antibiotics more than 48 hours after surgery was finished, and the overall, average duration of prophylaxis was 57 hours.

► Oral and intravenous formulations are equally effective, but the combination is even better.

A pairing of oral and intravenous formulations was better than any intravenous drug alone and any oral drug alone. But the study results were unable to clearly show the ideal time to administer the two formulations of antibiotics relative to each other. ■

Additional antibiotics beyond the single dose given within 2 hours of the start of surgery do not add protection, no matter how long the operation.