New Study Reveals Possible Link Between Therapy for Inflammatory Bowel Disease And Non-Melanoma Skin Cancer

San Diego, CA (October 26, 2009) – Findings from a new retrospective cohort study presented at the American College of Gastroenterology’s 74th Annual Scientific meeting in San Diego indicate that patients with Inflammatory Bowel Disease (IBD), especially those receiving the thiopurine class of medications to treat IBD, may be at risk for developing non-melanoma skin cancer (NMSC).

Dr. Millie Long, of the University of North Carolina, Chapel Hill, and her colleagues examined the records of 26,403 patients with Crohn’s disease and 26,974 patients with ulcerative colitis, dating from 1996 through 2005. The researchers investigated whether IBD could be associated with a higher risk of NMSC and whether the risk of NMSC increased as a result of immunosuppressive and biologic medications.

Each IBD patient in the cohort study was matched according to age, gender and region of the country with three randomly selected control patient records who did not have Crohn’s disease or ulcerative colitis. In addition, in a nested case-control study, 387 patients with Crohn’s disease and NMSC and 355 patients with ulcerative colitis and NMSC were matched on age, gender and region of the country with four random control patients with Crohn’s disease or ulcerative colitis who did not have NMSC to evaluate the impact of immunosuppressive and biologic medications on NMSC risk.

According to the study findings, the incidence rate ratio (IRR) of NMSC was higher in patients with IBD compared to their matched controls (IRR: 1.64). In addition, recent use of any immunosuppressive medication (within 90 days) was associated with greater risk of NMSC (adjusted Odds Ratio (OR) 3.28), as was recent use of the thiopurine class of immunosuppressive medications (adjusted OR 3.56) and recent use of biologic medications in patients with Crohn’s disease (adjusted OR 2.07).
Persistent use of any immunosuppressive medication (>365 days) was strongly associated with NMSC (adjusted OR 4.04). In particular, persistent use of the thiopurine class was strongly associated with NMSC (adjusted OR 4.27). Persistent use of biologic medications in patients with Crohn’s disease was also associated with NMSC (adjusted OR 2.18).

“The increased risk of NMSC in patients with IBD is likely related to the immunosuppressive medications used to treat the disease, although we can’t rule out changes to the immune system itself as a result of IBD as contributing to this risk,” explains Dr. Long who led the study. “In patients on immunosuppression therapy after organ transplant, previous studies have shown a clear association with NMSC. Other studies have demonstrated that azathioprine, which is in the thiopurine class, can increase the photosensitization of human skin.”

“Our study demonstrates that patients with IBD on immunosuppression may also be at risk for NMSC. As a result, our long term management plans for IBD patients should stress the daily use of broad-spectrum sunscreen and increased awareness of NMSC to help to prevent complications,” concludes Dr. Long.

**About Inflammatory Bowel Disease**

IBD includes two related but different diseases: ulcerative colitis and Crohn's disease. These diseases cause chronic inflammation of the intestinal tract, which leads to a variety of symptoms and can also involve organs other than the intestines. IBD is a lifelong disease with periods of active disease alternating with periods of disease control (remission). IBD is sometimes confused with but is different than irritable bowel syndrome.

According to the American College of Gastroenterology, there are more than 1 million people with IBD in the United States with new cases diagnosed at a rate of 10 cases per 100,000 people. These diseases account for 700,000 physician visits per year and 100,000 hospitalizations per year in the United States. Ulcerative colitis can be cured with surgery but Crohn's disease cannot be cured.

**About the American College of Gastroenterology**

Founded in 1932, the American College of Gastroenterology (ACG) is an organization with an international membership of more than 11,000 individuals from 80 countries. The College is committed to serving the clinically oriented digestive disease specialist through its emphasis on scholarly practice, teaching and research. The mission of the College is to serve the evolving needs of physicians in the delivery of high quality, scientifically sound, humanistic, ethical, and cost-effective health care to gastroenterology patients. [www.acg.gi.org](http://www.acg.gi.org)

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