

Sleep duration affects risk for ulcerative colitis

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If you are not getting the recommended seven-to-eight hours of sleep each night, you may be at increased risk of developing ulcerative colitis, according to a new study¹ in *Clinical Gastroenterology and Hepatology*, the official clinical practice journal of the American Gastroenterological Association.

"Both short and long durations of sleep have important health implications and are associated with increased overall mortality, [cardiovascular disease](#) and cancer," said lead study author Ashwin N. Ananthakrishnan, MD, MPH, Massachusetts General Hospital. "Our findings indicate that ulcerative colitis may potentially be added to this list. We found that less than six hours of sleep per day and more than nine hours of sleep per day are each associated with an increased risk of ulcerative colitis."

Researchers conducted a prospective study of women who were enrolled in the Nurses' Health Study (NHS) I since 1976 and NHS II since 1989 and followed through detailed biennial questionnaires with greater than 90 percent follow-up. The large size of the cohorts, prospective design and prolonged duration of follow-up provide a unique opportunity to examine the association between [sleep duration](#) and incident disease with sufficient power to adjust for potential confounders.

The results demonstrated that there is a "U-shaped" relationship between sleep duration and risk of [ulcerative colitis](#), with both short and long duration of sleep being associated with an increased risk of disease. These observed associations were independent of other known [environmental risk factors](#).

In a previous study², also published in *Clinical Gastroenterology and Hepatology* last year, Ananthakrishnan and colleagues had reported that poor sleep quality, even while in remission, resulted in a two fold increase in risk of Crohn's disease flares at six months. "All these data together support a growing recognition of the impact of [sleep disruption](#) on the immune system, and the need for providers to frequently inquire about sleep duration and quality as an important parameter of health in patients with inflammatory bowel diseases," said Dr. Ananthakrishnan.

The authors acknowledge several study limitations. First, the study

population consisted predominantly of white female nurses and is thus not representative of the gender and ethnic distribution in the general population. Sleep duration was also self-reported. However, the size of the study and quality of data substantiate these findings.

Future studies are warranted to better understand mechanisms by which sleep may influence intestinal inflammation.

More information: 1. Ananthakrishnan, A. N., Sleep Duration Affects Risk for Ulcerative Colitis: A Prospective Cohort Study. *Clinical Gastroenterology and Hepatology* 2014; 12(11): 1879-1886.

[www.cghjournal.org/article/S15 ... \(14\)00627-2/fulltext](http://www.cghjournal.org/article/S1556-0627-2/fulltext)

2. Ananthakrishnan, A. N., Sleep Disturbance and Risk of Active Disease In Patients With Crohn's Disease and Ulcerative Colitis. *Clinical Gastroenterology and Hepatology* 2013; 11(8): 965-971.

[www.cghjournal.org/article/S15 ... \(13\)00164-X/abstract](http://www.cghjournal.org/article/S1556-0627-13-00164-X/abstract)

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