Prostate Cancer Linked to Inflammatory Bowel Disease

Inflammatory bowel disease is associated with a nearly 5-fold increased risk of prostate cancer, study finds.

Men with inflammatory bowel disease (IBD) are at elevated risk of prostate cancer (PCa) overall as well as clinically significant PCa, new data suggest.

In a retrospective study comparing 1033 men with IBD and 9306 men without IBD matched by age and race (controls), investigators found that the 10-year incidence of any PCa was 4.4% in the IBD group compared with 0.65% in the control arm. The 10-year incidence of clinically significant PCa—defined as Gleason grade group 2 or higher—was 2.4% in the IBD group compared with 0.42% among controls. In adjusted analyses, the presence of IBD, compared with its absence, was associated with a significant 4.8- and 4.0-fold increased risk of any PCa and clinically significant PCa, respectively, Jacob A. Burns, MD, of the Northwestern University Feinberg School of Medicine in Chicago, and colleagues reported in *European Urology*.

In addition, the study revealed that after about age 60, PSA values were higher among patients with than without IBD.“It is conceivable that the local or systemic inflammatory state resulting from IBD may lead to chronic prostatic inflammation and, in some cases, eventual development of PCa,” the authors explained.Dr Burns and his collaborators also noted that both PCa and IBD have significant genetic predispositions. Genome-wide association studies have identified numerous susceptibility alleles for IBD and PCa, they pointed out. “Shared risk alleles could partially explain the association between IBD and PCa.”Another possibility is that high rates of PCa among men with IBD may result from greater outcome ascertainment in the IBD group because patients with IBD commonly have frequent encounters with the health care system. “Additionally, based on the nature of the disease, men with IBD would be more likely to under rectal examinations,” they wrote. “Indeed, we noted more abnormal rectal examinations among men with IBD.” Strengths of the study include the size of the cohort and distribution of patients over a representative age range, as well as longitudinal follow-up of all patients over a period of nearly 21 years. In a discussion of study limitations, the authors noted that because of the retrospective design, they could not account for unmeasured variables, such as disease location in IBD, markers of IBD severity, family history of PCa, and socioeconomic data. In addition, the study was conducted at an academic medical center, which limits the external validity of its findings.The study was conducted a single academic medical center from 1996 to 2017. The median follow-up was longer for cases than controls (6.5 vs 4.7 years). All men had at ast 1 PSA test. The median age of cases and controls was 53 years at the time of the first PSA measurement.

**Reference**

Burns JA, Weiner AB, Catalona WJ, et al. [Inflammatory bowel disease and the risk of prostate cancer](https://www.europeanurology.com/article/S0302-2838(18)30938-2/fulltext). *Eur Urol*. 2018; published online ahead of print.