Gut microbiome diversity lower in chronic pelvic pain syndrome

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(HealthDay)—Gut microbiome diversity is significantly lower in

patients with chronic pelvic pain syndrome, with wider clustering, according to a study published in the August issue of *The Journal of Urology*.

Daniel A. Shoskes, M.D., from the Glickman Urological Institute in Cleveland, and colleagues examined the gut microbiome in patients with chronic pelvic pain syndrome and controls who were asymptomatic or only had urinary tract symptoms. Total DNA was extracted from samples and bacterial specific 16S rRNA capture was performed. Complete data were available for 25 patients and 25 controls.

The researchers identified tighter clustering of controls in a space distinct from the wider clustering of cases in three-dimensional UniFrac principal coordinate analysis (P = 0.001); cases had decreased alpha diversity (P = 0.001). Three taxa were overrepresented in cases and 12 were underrepresented (including Prevotella) compared with controls.

"Patients with chronic pelvic pain syndrome have significantly less gut microbiome diversity which clusters differently from controls, and robustly lower counts of Prevotella, with separation sufficient to serve as a potential biomarker," the authors write. "The gut microbiome may serve as disease biomarker and potential therapeutic target in chronic pelvic pain syndrome."

More information: Abstract
Full Text (subscription or payment may be required)