

Novel bacterium linked to cord colitis syndrome

August 8 2013



A novel bacterium is associated with cord colitis syndrome, a complication of umbilical-cord hematopoietic stem-cell transplantation, according to a study published in the Aug. 8 issue of the *New England Journal of Medicine*.

(HealthDay)—A novel bacterium is associated with cord colitis syndrome, a complication of umbilical-cord hematopoietic stem-cell transplantation, according to a study published in the Aug. 8 issue of the *New England Journal of Medicine*.

To examine whether cord colitis syndrome has an infectious origin, Ami S. Bhatt, M.D., Ph.D., from the Dana-Farber Cancer Institute in Boston, and colleagues performed shotgun DNA sequencing on four endoscopic colon-biopsy specimens from two patients with cord colitis. Human and known microbial sequences were removed and the residual sequences were assembled into a bacterial draft genome.

The researchers found 2.5 million sequencing reads that did not match known organisms and were then assembled into a 7.65-Mb draft genome. The genome was highly homologous to bacteria in the bradyrhizobium genus and named *Bradyrhizobium enterica*. DNA from *B. enterica* was present in biopsies from three additional patients with cord colitis but absent from samples from healthy controls and patients with [colon cancer](#) or graft-versus-host disease.

"Although we have not shown that *B. enterica* is the cause of cord colitis, we have demonstrated the usefulness of sequencing-based technologies for the unbiased identification of previously undiscovered candidate [human pathogens](#)," Bhatt and colleagues conclude.

More information: [Full Text \(subscription or payment may be required\)](#)

[Editorial \(subscription or payment may be required\)](#)

Copyright © 2013 [HealthDay](#). All rights reserved.

Citation: Novel bacterium linked to cord colitis syndrome (2013, August 8) retrieved 20 March 2024 from <https://medicalxpress.com/news/2013-08-bacterium-linked-cord-colitis-syndrome.html>

| |
|--|
| <p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p> |
|--|