

Pinpointing cause of colic: Researchers identify organism

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Researchers at The University of Texas Health Science Center at Houston say one organism discovered during their study may unlock the key to what causes colic, inconsolable crying in an otherwise healthy baby.

"Right now, pediatric gastroenterologists can treat just about anything that comes through the door," said J. Marc Rhoads, M.D., professor of pediatrics at The University of Texas Medical School at Houston, which is part of the UT Health Science Center at Houston. "With colic, there is no evidence-based treatment we can offer. Colic can be a dangerous situation for a baby. The parent's frustration over the crying can lead to maternal frustration, post-partum depression and even thoughts of harming the baby."

Published in today's online edition of the [Journal of Pediatrics](#), the study pointed to an organism called *Klebsiella*, a normally occurring bacterium that can be found in the mouth, skin and intestines. In the study of 36 babies, half of which had colic, researchers found the bacterium and gut inflammation in the intestines of the babies with colic.

"We believe that the bacterium may be sparking an inflammatory reaction, causing the gut inflammation," said Rhoads, the lead investigator for the study. "Inflammation in the gut of colicky infants closely compared to levels in patients with [inflammatory bowel disease](#). Colic could prove to be a precursor to other gastrointestinal conditions such as [irritable bowel syndrome](#), celiac disease and allergic

gastroenteropathies."

Babies in the study were fed breast milk and/or formula. Previous research articles have not shown significant data supporting the theory that breastfeeding protects infants against colic. The babies in the study were recruited from UT Physicians' pediatric clinics and Kelsey-Seybold clinics.

Colic is defined as unexplained and severe crying in an otherwise healthy newborn. It usually occurs in infants three months old or younger and lasts for more than three hours daily for at least three days a week."Colic is a very common condition. It affects about 15 percent of normal, healthy infants. More than half of infant deaths fall into the age category of colic. We may be able to prevent deaths if we can find a treatment," Rhoads said.

Right now, pediatricians prescribe special hypoallergenic infant formula to try and treat colic, but none of it has been proven in studies to be effective in treating the condition.

"During our study, we also found that the babies that didn't have colic had more types of bacteria in their intestines. The presence of more bacteria may indicate that specific bacterial species (phylotypes) are beneficial to humans," Rhoads said.

The study was funded by the Gerber Foundation.

A larger study is needed to examine *Klebsiella* and the use of a probiotic, which is a dietary supplement made up of good bacteria, to control the gut inflammation. Before that can begin, Rhoads said an adult trial will take place to examine the safety of the probiotics in healthy adults. For that study, UT researchers are recruiting 40 adult patients.

Source: University of Texas Health Science Center at Houston ([news : web](#))

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