

Can Antibiotics Improve the Symptoms of the Irritable Bowel Syndrome?

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The full report is titled “The Effect of a Nonabsorbed Oral Antibiotic (Rifaximin) on the Symptoms of the Irritable Bowel Syndrome. A Randomized Trial.” It is in the 17 October 2006 issue of *Annals of Internal Medicine* (volume 145, pages 557-563). The authors are M. Pimentel, S. Park, J. Mirocha, S.V. Kane, and Y. Kong.

What is the problem and what is known about it so far?

The irritable bowel syndrome (IBS) causes symptoms of cramping, bloating, gas, diarrhea, and constipation for no apparent reason. The cause of IBS is uncertain, but some evidence suggests that IBS is caused by an abnormal growth of bacteria. If bacteria contribute to IBS, then treatment with antibiotics might be helpful.

Why did the researchers do this particular study?

To determine whether rifaximin, an antibiotic that works only in the gut, can improve symptoms in people with IBS.

Who was studied?

87 people with IBS at 2 medical centers.

How was the study done?

After recording symptoms for a week in a symptom diary, participants were assigned at random to receive rifaximin or placebo for 10 days. They recorded their symptoms weekly for 10 weeks after they stopped taking the drug or placebo. The researchers then compared the severity of symptoms in the 2 groups.

What did the researchers find?

Bloating and overall symptoms improved in participants who took the antibiotic. However, the researchers could not detect a difference in symptoms of diarrhea or constipation. Rifaximin did not cause any clinically significant side effects.

What were the limitations of the study?

A relatively small number of patients and a short duration limited the study's findings. The findings might differ if more participants were studied and if patients were followed for a longer period of time.

What are the implications of the study?

Rifaximin taken for 10 days seems to provide some relief of symptoms to people with IBS.

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