

What Your Patient Reads

Antibiotics for IBS?

On Jan 9, 2011 the CBC news posted an article describing new research study results for relief of irritable bowel syndrome symptoms. Two studies showing 41 per cent of patients taking the antibiotic rifaximin reported substantially improved symptoms for up to 10 weeks compared with placebo. The two studies involved 1260 patients with mild to moderate IBS without constipation. Patients were given either a placebo or 550 mg of rifaximin three times a day for two weeks. Lead researcher Dr. Mark Pimentel of Cedars-Sinai Medical Center, noting the improved symptoms lasted past the two weeks, remarked “we’ve actually touched on the cause of IBS, as opposed to just covering up symptoms.” Results from other studies investigating overgrowth of bacteria in the gut as the cause of IBS have been mixed. Dr. Jan Tack from the University of Leuven in Belgium states that the response to rifaximin in these studies is novel and important as well as within the range seen with other effective IBS treatments. Salix Pharmaceuticals, the makers of rifaximin, is seeking to expand the drug’s use to IBS. Rifaximin is approved for traveller’s diarrhea and complications of liver disease. The studies were paid for by Salix, some researchers were Salix employees and others received consulting fees from the company. Cedars-Sinai holds a patent on the use of rifaximin for IBS.

Antibiotic helps with irritable bowel: studies. CBC news Jan 9, 2011. <http://www.cbc.ca:80/health/story/2011/01/06/antibiotic-irritable-bowel.html>

Referenced Work

Pimentel M, et al. Rifaximin therapy for patients with irritable bowel syndrome without constipation. *N Engl J Med.* 2011 Jan 6;364(1):22-32. PMID: 1208106.

Additional References from the Medical Literature

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Tack J. (2011). **Antibiotic therapy for the irritable bowel syndrome.** *N Engl J Med.* Jan 6;364(1):81-2.

Camilleri M, Tack JF. (2010) **Current medical treatments of dyspepsia and irritable bowel syndrome.** *Gastroenterol Clin North Am.* Sep;39(3):481-93.

Ford AC. (2010). **Breath testing and antibiotics for possible bacterial overgrowth in irritable bowel syndrome.** *Expert Rev Anti Infect Ther.* Aug;8(8):855-7.

Pimental's Key Points

- Two phase 3, double blind, placebo controlled trials.
- Participants were at least 18 years old, had a colonoscopy within previous two years, diagnosis of and had current symptoms of IBS, and did not have adequate IBS relief at time of screening and time of randomization.
- Total of 1260 patients in US and Canada who had IBS without constipation were treated in parallel from June 2008 to August 2009.
- Patients were randomly assigned to either 550 mg of rifaximin or placebo, three times a day for two weeks and followed for an additional ten weeks.
- Rifaximin is a minimally absorbed antibiotic that targets the gut and is associated with a low risk of bacterial resistance.
- Significantly more people in the rifaximin group had adequate relief of global IBS symptoms in the first four weeks after treatment.
- More patients in the rifaximin group had adequate relief of bloating.

To obtain a copy of the articles listed or to request a literature search on this topic please contact the University of Manitoba Health Sciences Libraries.

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Additional References from the Medical Literature

Ghoshal UC, Park H, Gwee KA. (2010). **Bugs and irritable bowel syndrome: The good, the bad and the ugly.** *J Gastroenterol Hepatol.* Feb;25(2):244-51. Epub 2010 Jan 14.

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Lacy BE, Weiser K, De Lee R. (2009). **The treatment of irritable bowel syndrome.** *Therap Adv Gastroenterol.* Jul;2(4):221-38.

Pimentel M. (2009). **Review of rifaximin as treatment for SIBO and IBS.** *Expert Opin Investig Drugs.* Mar;18(3):349-58.

Di Stefano M, Corazza GR. (2008). **The rationale for antibiotics in IBS.** *Am J Gastroenterol.* Oct;103(10):2652.

Pimentel M, Park S, Mirocha J, Kane SV, Kong Y. (2006). **The effect of a nonabsorbed oral antibiotic (rifaximin) on the symptoms of the irritable bowel syndrome: a randomized trial.** *Ann Intern Med.* Oct 17;145(8):557-63.

Fumi AL, Trexler K. (2008). **Rifaximin treatment for symptoms of irritable bowel syndrome.** *Ann Pharmacother.* Mar;42(3):408-12. Epub 2008 Feb 26.

Pimentel M, Lezcano S. (2007). **Irritable Bowel Syndrome: Bacterial Overgrowth--What's Known and What to Do.** *Curr Treat Options Gastroenterol.* Aug;10(4):328-37.

Yang J, Lee HR, Low K, Chatterjee S, Pimentel M. (2008). **Rifaximin versus other antibiotics in the primary treatment and retreatment of bacterial overgrowth in IBS.** *Dig Dis Sci.* 2008 Jan;53(1):169-74. Epub 2007 May 23.

- Significantly more people in the rifaximin group had a response to treatment as assessed by daily ratings of IBS symptoms, bloating, abdominal pain and stool consistency.
- Incidence of adverse events were similar in the rifaximin and placebo groups.
- Conclusion: Treatment with 550 mg of rifaximin three times a day for two weeks provides better relief than placebo for up to ten weeks after completion of therapy.

Links For Your Patients

MedlinePlus: Irritable Bowel Syndrome

<http://www.nlm.nih.gov/medlineplus/irritablebowelsyndrome.html>

National Digestive Diseases Information Clearinghouse (NDDIC)

http://digestive.niddk.nih.gov/ddiseases/pubs/ibs_ez/index.htm

Merck Manual Home Edition: Irritable Bowel Syndrome (IBS)

<http://www.merckmanuals.com/home/sec09/ch129/ch129a.html>

Mayo Clinic: Irritable Bowel Syndrome

<http://www.mayoclinic.com/health/irritable-bowel-syndrome/DS00106>

NOAH: Irritable Bowel Syndrome

<http://www.noah-health.org/en/stomach/conditions/irritable.html>

Annals of Internal Medicine Summaries for Patients: Can Antibiotics Improve the Symptoms of the Irritable Bowel Syndrome?

<http://www.annals.org/content/145/8/I-24.full>

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