



ATLANTIS

*Investigating amitriptyline as
second-line treatment for IBS*

Lay Summary of Results:

**Amitriptyline Improves Symptoms for
People with Irritable Bowel Syndrome**

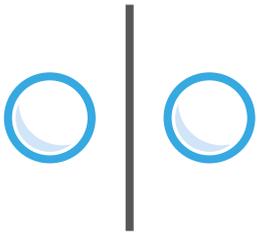
What Did We Know Already?



As you know, people with irritable bowel syndrome (IBS) get unexplained tummy (abdominal) pain and changes in how often they go to the toilet (poo). It can have a big impact on people's lives.

Previous small studies suggested that amitriptyline used at a low dose may help IBS. Amitriptyline is a medicine already used to treat other conditions, such as poor sleep and chronic pain, and could be easily prescribed by general practitioners (GPs) for IBS. However, until ATLANTIS we didn't know if it was effective and whether any benefits outweighed side-effects.

What Did We Do?



We recruited 463 adults with active symptoms of IBS who had already tried other treatments from general practices across England.

Participants received either low-dose amitriptyline 10 mg or placebo (a dummy tablet) for 6 months. Participants could adjust the dose (between one and three tablets daily, or 10 mg to 30 mg per day) according to symptoms and side effects.

Neither the researchers nor the participants knew which treatment they were getting. Participants recorded symptoms using a questionnaire called the IBS Severity Scoring System (IBS-SSS). This uses a scale, where up to 500 points is the highest possible score for severity of symptoms.



We looked at the difference in average IBS-SSS score between participants receiving amitriptyline and placebo. We also asked participants whether they thought their symptoms had improved, overall.

Finally, we looked at the effect of amitriptyline on mood, ability to work, and non-gut symptoms related to IBS, as well as safety and whether they found it acceptable to take. Some participants and GPs were interviewed about their experiences.

What Did We Find?



Compared with participants taking placebo, participants taking amitriptyline had a bigger improvement in their IBS-SSS scores at 6 months (a 99-point drop compared with a 69-point drop). Participants taking amitriptyline were almost twice as likely as those taking placebo to report an overall improvement in IBS symptoms.

Amitriptyline improved a range of IBS symptom measures but did not change symptoms of anxiety or depression, or participant's ability to work.

A total of 30 participants (13%) stopped taking amitriptyline and 20 (9%) stopped the placebo before 6 months because of side effects. The most common side effects were dry mouth, drowsiness, and dizziness.

Both GPs and participants said that low-dose amitriptyline is likely to be acceptable, and welcomed, as an IBS treatment. Participants said that it was important to explain clearly that amitriptyline is not being used as an antidepressant in IBS before using it. Participants liked being able to adjust their dose and valued contact with the research team.

What Have We Learnt?



This study showed that amitriptyline is more effective than a placebo tablet and is safe.

GPs can offer low-dose amitriptyline to people with IBS as part of shared decision-making if symptoms don't improve with first-line treatments (e.g., dietary changes or over the counter medications, such as laxatives, anti-diarrhoeal drugs, or antispasmodics). Patients should be supported and helped to adjust their dose as needed.

The dose adjustment sheet used in this trial will be made available as a resource to help guide use by patients.

For more information about this research, visit: <https://ctr.u.leeds.ac.uk/atlant/>

If you have questions about your own health or care, please contact your GP.

This trial is registered with the ISRCTN (ISRCTN48075063).

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The main research paper is available open access here:

[https://doi.org/10.1016/S0140-6736\(23\)01523-4](https://doi.org/10.1016/S0140-6736(23)01523-4)

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<https://ctr.u.leeds.ac.uk/atlant/>