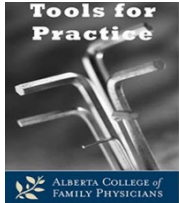


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But I am not Depressed: Antidepressants for Irritable Bowel Syndrome

Clinical Question: Do antidepressant medications improve irritable bowel syndrome (IBS) symptoms?



Bottom Line: Both tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs) may improve overall IBS symptoms. About 55% of patients treated with TCAs or SSRIs will benefit compared to ~35% with placebo. Only TCAs improve abdominal pain for ~60% of patients compared to ~30% with placebo. TCA studies reported more side effects (drowsiness and dry mouth) than SSRIs.

Evidence:

- Focusing on the most recent systematic review, which included 18 randomized controlled trials (RCTs); 1127 adult patients; 42-100% female; IBS subtype usually not specified. Patient reported outcomes presented where available.¹
 - Tricyclic antidepressants (TCAs): 12 RCTs (787 patients) of amitriptyline, imipramine, desipramine, trimipramine, doxepin, and nortriptyline, versus placebo. Over 6-12 weeks:
 - Global IBS symptom improvement: 57% TCA versus 36% placebo; number needed to treat (NNT)=5.
 - Abdominal pain improvement: 59% TCA versus 28% placebo; NNT=4.
 - Adverse Events (mostly drowsiness, dry mouth): 36% TCA versus 20% placebo; number needed to harm (NNH)=7.
 - SSRIs: 7 RCTs (356 patients) of fluoxetine, paroxetine, and citalopram. Over 6-12 weeks:
 - Global IBS symptom improvement: 55% SSRI versus 33% placebo; NNT=5.
 - Abdominal pain improvement: 45% SSRI versus 26% placebo; not statistically different.
 - Adverse events: 37% SSRI versus 27% placebo; not statistically different.
 - Evidence limited by:
 - Small sample sizes, short study duration, and likely publication bias.
 - Adverse events not reported in all studies.
- Older systematic reviews show similar results.^{2,3}

Context:

- Canadian guidelines recommend offering TCAs or SSRIs, irrespective of whether patients have depression or anxiety.⁴
- Up to 5 million adult Canadians may have symptoms compatible with IBS.⁵
- Indirectly, evidence for antidepressants in IBS appears stronger than antispasmodics,⁶ fiber,⁴ FODMAP diet,⁷ or probiotics.⁴
- TCAs may work better for IBS-diarrhea subtype, while SSRIs may work better for IBS-constipation subtype, but this has not been formally studied.⁴
- Patients suspected of having IBS should have celiac disease ruled-out.

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Disclosure:

Authors do not have any conflicts of interest to declare.

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