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## Q / Which is better for IBS pain in women—antispasmodics or antidepressants?

### EVIDENCE-BASED ANSWER

**A** / IT'S UNCLEAR WHICH THERAPY IS MORE EFFECTIVE because the evidence is insufficient. What is known is that tricyclic antidepressants, peppermint oil, and antispasmodics all have been shown superior to placebo for treating abdominal pain in female patients with irritable bowel syndrome (IBS) (strength of recommendation: A, meta-analyses).

#### Antispasmodics and tricyclics alleviate abdominal pain

A 2011 Cochrane review of 56 randomized controlled trials (RCTs) with 3725 patients compared bulking agents, antispasmodics, or antidepressants with placebo for treating IBS.<sup>1</sup> The pooled results from 13 RCTs with 1392 patients (65% female, mean age 45 years) showed that more patients had improved abdominal pain with antispasmodics than placebo over treatment periods varying from 6 days to 6 months (58% vs 46%; relative risk [RR]=1.3; 95% confidence interval [CI], 1.1-1.6; number needed to treat [NNT]=7).

The clinical relevance of the antispasmodic data is limited because the antispasmodics found effective for abdominal pain aren't available in the United States.

The pooled results from 8 RCTs with 517 patients (72% female, mean age 40) demonstrated greater improvement of abdominal pain with tricyclic and selective serotonin reuptake inhibitor antidepressants than placebo over 6 to 12 weeks (54% vs 37%; RR=1.5; 95% CI, 1.1-2.1; NNT=5).

However, subgroup analysis found a statistically significant benefit for tricyclic antidepressants (4 trials; N=320; RR=1.3; 95% CI, 1.0-1.6) but no benefit for SSRIs (4 trials; N=197; RR=2.3; 95% CI, 0.79-6.7).

#### Effective antispasmodics aren't available in the United States

A 2012 meta-analysis of 23 RCTs with 2585 patients examined the effect of antispasmodic agents, alone or in combination, to treat IBS.<sup>2</sup> Pooled results from 13 RCTs with 2394 patients (69% female, ages 16 years or older) favored treatment with antispasmodics over placebo for abdominal pain (odds ratio [OR]=1.5; 95% CI, 1.3-1.8). No difference in adverse events was found between antispasmodics and placebo (9 trials; N=2239; OR=0.74; 95% CI, 0.54-0.98). The antispasmodics found effective for abdominal pain in this meta-analysis aren't available in the United States.

#### Peppermint oil helps, but can cause heartburn

A 2013 meta-analysis of 9 RCTs with 726 patients compared various doses of enteric-coated peppermint oil with placebo over a minimum of 2 weeks' treatment.<sup>3</sup> Five RCTs with 357 patients (62% female, 13.4% children) demonstrated improvement of abdominal pain in 57% of patients taking peppermint oil compared with 27% receiving placebo (RR=2.1; 95% CI, 1.6-2.8; NNT=4 at 2 to 8 weeks). No statistically significant heterogeneity was identified among the treatment groups.

Pooled analysis found that peppermint

oil patients were more likely than placebo patients to experience an adverse event (7 trials; N=474; 22% vs 13%; RR=1.7; 95% CI, 1.3-2.4),

but that the events were generally mild and transient. The most frequently reported adverse event was heartburn. **JFP**

#### References

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