PWE-065

**EFFICACY OF ANTIDEPRESSANTS IN IRRITABLE
BOWEL SYNDROME: AN UPDATED SYSTEMATIC
REVIEW AND META-ANALYSIS CONTROLLING FOR
DEPRESSION**

doi:10.1136/gut.2011.239301.328

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Introduction Antidepressants may be effective for the treatment of irritable bowel syndrome, but some experts are sceptical, and effect of co-existent depression has not been controlled for in previous meta-analyses. We updated a previous systematic review to estimate their efficacy in the treatment of IBS and examine this issue.

Methods MEDLINE, EMBASE and the Cochrane Controlled Trials Register were searched (up to November 2010) to identify randomised controlled trials (RCTs) comparing antidepressants with placebo in adult IBS patients. Subjects were required to be followed up for at least 1 week, and studies had to report either a global assessment of IBS symptom cure or improvement, or abdominal pain cure or improvement, after completion of therapy. Data were extracted as intention-to-treat analyses with drop-outs assumed to be treatment failures, and pooled using a random effects model. Effect of antidepressants compared to placebo was reported as the relative risk (RR) of remaining symptomatic, with a 95% CI. Trials that screened for and excluded depressed individuals were pooled separately in a subgroup analysis.

Results 16 RCTs were eligible for inclusion, including 1022 patients, 554 of whom received antidepressants and 468 placebo. Nine RCTs used tricyclic antidepressants (TCAs), six RCTs selective serotonin reuptake inhibitors (SSRIs), and one RCT both. There were 242 (43.7%) patients assigned to antidepressant therapy with persistent or unimproved IBS symptoms following therapy, compared to 314 (64.9%) allocated to placebo (RR of IBS symptoms persisting = 0.67; 95% CI 0.56 to 0.78). When the 10 RCTs of TCAs were pooled, 166 (43.9%) of 378 had persistent symptoms, compared to 189 (62.2%) of 304 receiving placebo (RR = 0.70; 95% CI 0.60 to 0.83). In the five RCTs of SSRIs 76 (43.2%) of 176 patients allocated to SSRIs had persistent symptoms, compared to 125 (69.4%) of 180 placebo patients (RR = 0.63; 95% CI 0.44 to 0.91). When only the four RCTs that screened for and excluded depressed individuals were included in the analysis RR of symptoms persisting was 0.73 (95% CI 0.47 to 1.15), compared with a RR of 0.65 (95% CI 0.55 to 0.78) in the other 12 trials. However, this difference was not statistically significant (Cochrane Q = 0.64).

Conclusion Evidence continues to accumulate for the efficacy of antidepressants in the treatment of IBS. However, part of their beneficial effect may stem from the treatment of co-existent depression. More RCTs examining their efficacy in non-depressed IBS patients are required to clarify this issue.

Competing interests None.

Keywords Antidepressants, Irritable Bowel Syndrome, Meta-analysis.