Review: antidepressants are effective for clinical unexplained physical symptoms and syndromes


QUESTION: In adults who have medically unexplained physical symptoms (MUPS), do antidepressants improve outcomes?

Data sources
Studies were identified by searching Medline (1966–98), PsycLIT (1974–98), EMBASE/Excerpta Medica (1974–98), the Cochrane Library, the Federal Research in Progress database, and bibliographies of relevant articles.

Study selection
2 reviewers independently selected studies that were randomised controlled trials (RCTs) (including crossover trials), involved adults with MUPS, compared antidepressants with placebo or a non-antidepressant intervention, reported measurable outcomes, and were published in English. Disagreements were resolved by consensus.

Primary Care.

Source of funding: in part, the MacArthur Foundation Initiative on Depression in Primary Care.

For correspondence: Dr P G O’Malley, Department of Medicine, Walter Reed Army Medical Center, 6900 Georgia Avenue, Washington, DC 20307-5001, USA. Fax +1 202 782 7363.

Abstract and commentary also appears in Evidence-Based Medicine.

Antidepressants v placebo for unexplained symptoms or syndromes†

<table>
<thead>
<tr>
<th>Symptoms or syndromes</th>
<th>Number of RCTs for each type of antidepressant</th>
<th>Mean quality score</th>
<th>Pooled OR (95% CI)‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCA</td>
<td>SSRI</td>
<td>Anti-S</td>
<td>Other</td>
</tr>
<tr>
<td>Chronic headache</td>
<td>21</td>
<td>8</td>
<td>23</td>
</tr>
<tr>
<td>Fibromyalgia</td>
<td>12</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Functional GI disorders</td>
<td>11</td>
<td>–</td>
<td>2</td>
</tr>
<tr>
<td>Idiopathic pain</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Tinnitus</td>
<td>2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Chronic fatigue</td>
<td>–</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>All</td>
<td>56</td>
<td>17</td>
<td>28</td>
</tr>
</tbody>
</table>

†Anti-S=anti-serotonin; G1=gastrointestinal; OR=odds ratio; RCTs=randomised controlled trials; SSRI=selective serotonin reuptake inhibitor; TCA=tricyclic antidepressant. Median follow up was 9 weeks.
‡Odds ratios show a benefit for the antidepressant group.

Data extraction
Data extracted included symptoms, setting, treatment (regimens and follow up), patient characteristics, assessment of comorbid psychiatric disease, adverse effects, outcomes, and statistical analysis of reported results. Reviewers independently assessed the quality of study methods by using the Jadad scale.

Main results
94 RCTs on 6 symptom syndromes met the selection criteria. 6505 patients (76% women) were studied for a median of 9 weeks. The overall mean quality score was 4.8 (maximum score 8). The dropout rate was >20% in 40% of the RCTs. A meta-analysis of 48 RCTs combined results for improvement in any of the following outcomes: global assessment (patient or physician), symptom summary index scores, or pain severity scale scores (table), 4 patients (95% CI 3 to 7 patients) would need to be treated to improve 1 additional patient’s condition. A meta-analysis of the results for continuous outcomes reported a pooled standardised mean difference of 0.87 (CI 0.59 to 1.14), which is equivalent to a greater improvement for the average patient treated with antidepressants than for [81% (CI 72% to 87%)]* of the patients in the placebo group.

Conclusion
In patients with unexplained physical symptoms or syndromes, antidepressants are effective for improving outcomes, including symptoms and disability.

*Numbers calculated from data in article.

COMMENTARY

Patients with MUPS are common in primary and secondary care. Increasing evidence exists that psychological treatments such as cognitive behaviour therapy (CBT) are effective in the treatment of such symptoms. Unfortunately, suitably trained therapists are scarce, and psychological treatment is unacceptable to some patients with MUPS. Thus, effective pharmacological treatments have a potentially substantial role in the treatment of patients with MUPS.

The review by O’Malley et al supports the use of antidepressants in the treatment of a range of MUPS. The number needed to treat of 4 for short term improvement is clinically significant and is similar to that obtained with CBT. Importantly, it does not seem to be necessary to be depressed to benefit from “antidepressants,” and people with a wide range of MUPS appear to benefit. An important caveat is that most evidence applies to patients in secondary care with chronic symptoms.

Clinicians therefore have 2 evidence-based treatment approaches for patients with MUPS: psychological (CBT) and pharmacological (antidepressants). If CBT is available, there is little to choose between it and antidepressants. The patient should therefore be encouraged to choose, because compliance with and enthusiasm for the chosen treatment may profoundly influence outcome. The person with MUPS who rejects psychological treatment, however, may also reject the use of antidepressants for “physical” problems. The term “antidepressants” is unhelpful in this situation and is increasingly inappropriate as evidence for other indications accumulates.

Several further decisions face the clinician. Firstly, which antidepressant? No convincing evidence exists for 1 group. Secondly, what dose? Little evidence is available although, as the therapeutic action appears independent of antidepressive action, low doses may be effective. Finally, for how long? Antidepressants are effective treatments for people with MUPS over periods of weeks. Whether treatment can be withdrawn and the optimal duration of treatment are unclear, however. Several key knowledge gaps must therefore be addressed by further primary research. Until then, the clinician should consider prescribing antidepressants that are safe and well tolerated, with dose and duration determined empirically.

Jonathan Price, MA, MSc, MRCPsych
University of Oxford
Oxford, UK