Review: antidepressants improve depression in adults with physical illnesses


Question
Are antidepressive agents safe and effective for treating depression in adults who have physical illnesses?

Data sources
Studies were identified by searching Medline (to June 1998), the Cochrane Library Trial Register (June 1998), the Cochrane Depression and Neurosis Trial Register, and the British National Formulary using generic and proprietary names. 2 journals (Journal of Psychosomatic Research and General Hospital Psychiatry) and a specialist textbook were scanned, bibliographies were reviewed, and experts were contacted.

Study selection
Randomised controlled trials were selected if the patients studied were adults who had a physical illness plus documented depression, if antidepressive agents were compared with placebo or no treatment, and if outcomes of changes in depression, changes in physical illness, and treatment acceptability (rate of patients who completed the trial) were measured. Exclusion criteria were heterogeneous study groups; dementia, psychosis, or addictive behaviours; antidepressive agents used for pain relief; studies of euphoriants, adjuvants, or combination therapy; and the second arm of crossover studies.

Data extraction
Data were extracted on study quality and characteristics, depression, drug category, physical disease, disability, and outcomes.

Main results
18 trials (838 patients) met the inclusion criteria. Diseases studied were HIV/AIDS (n = 5), stroke (n = 5), cancer (n = 2), and single studies for multiple sclerosis, heart disease, renal failure, diabetes mellitus, mixed diagnoses, mixed diagnoses in the elderly, and head injury. Atypical antidepressive agents were used in 3 studies, tricyclics (TCAs) in 3 studies, and selective serotonin reuptake inhibitors (SSRIs) in 6 studies. Depression was reduced for all antidepressants (p < 0.001) and for TCAs (p = 0.002) (table) but not for other categories of antidepressants. 2 studies measured function and quality of life and neither showed improvements with antidepressants. 7 studies evaluated change in physical illness and 1 showed worse control in patients with diabetes (nortiptyline).

Conclusion
Antidepressive agents lead to improvements in depression for adults with physical illnesses.

Improvement in depression at the end of treatment (mean duration 6.5 wks) with antidepressive agents for adults with physical illnesses*

<table>
<thead>
<tr>
<th>Antidepressive agents</th>
<th>Placebo</th>
<th>RBI (95% CI)</th>
<th>NNT (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>47.9%</td>
<td>25.9%</td>
<td>29% (16 to 40)</td>
</tr>
<tr>
<td>Tricyclics</td>
<td>51.1%</td>
<td>24.5%</td>
<td>30% (9 to 47)</td>
</tr>
</tbody>
</table>

*Abbreviations defined in glossary; RBI, NNT, and CI calculated from data in article. Mean treatment duration was 6.5 weeks.

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Abstract and commentary also published in ACP Journal Club.

Commentary
Physical and psychiatric conditions frequently occur together in general hospital settings, and psychiatric symptoms in the presence of physical illness are more common than psychiatric symptoms alone in general practice. Many people are depressed, and evidence suggests that patients with physical illnesses recover less well from their depression than those without physical illness.

Gill and Hatcher make an important initial contribution to this area and confirm that depression in the presence of physical illness does respond to antidepressive agents. This effect is quite separate from the use of these drugs for analgesia in people who are physically ill.

With such a wide topic, the authors have left several questions unanswered, although they promise to cover some of these in the future. They correctly emphasise the importance of randomisation and the use of standardised psychiatric instruments in assessing outcome. More attention could have been given to quantifying the presence of physical illness for either severity or duration. They could also have highlighted the wide range of antidepressant doses used (double in the case of desipramine), given the small but significant dose effect relation. Studies of different antidepressant classes (TCAs, SSRIs, and atypical agents) were combined for analysis because they have been shown to be more alike than different for treatment response. It remains uncertain therefore whether patients who are physically ill and depressed tolerate SSRIs better than TCAs.

It is also unclear to what extent one can extrapolate from the findings in trials of depressed patients without physical illnesses. The authors suggest that this extrapolation might be possible, although the evidence comes from a non-randomised comparison among trials rather than looking at trials which randomised patients to either TCAs or SSRIs.

While we wait for answers to some of these questions, existing evidence highlights the importance of recognising and treating depression in patients who are physically ill, as well as understanding and using the wide range of effective antidepressive agents available.

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