QUESTION: What is the efficacy and long-term tolerability of citalopram for depression in elderly people?

Design
Open-label acute and continuation phase followed by randomised controlled parallel group trial of maintenance therapy (with blinded participants and clinicians).

Setting
Denmark; March 1996-June 1999.

Participants
A letter was sent to all people aged over 65 in two Danish municipalities to identify undiscovered depression. People with unipolar major depression were eligible (DSM-IV 296.2x or 296.3x; MADRS score of 22 or above). 230 people received acute treatment and 121 took part in the randomised phase (77% women; mean age 75 years). Exclusion criteria were history of mania, schizophrenia, hypomania, epilepsy, drug or alcohol abuse or severe somatic disorders; depressive episode lasting more than 12 months; fluoxetine within 5 weeks or other antidepressants within 3 days; lithium, carbamazepine or valproate within 2 weeks; electroconvulsive therapy within 8 weeks, or a score of 5 or above on the MADRS suicide scale.

Intervention
Participants were treated with 8 weeks of flexible doses of open-label citalopram (10–40mg per day) followed by a stabilisation phase with individual fixed doses for 16 weeks. Responders were randomised to continue citalopram or receive placebo for a third period of at least 48 weeks. Doses of citalopram were 20, 30 or 40mg per day in the maintenance period. Concomitant psychotropic medication was not allowed, except for stable dose benzodiazepines and other hypnotics.

Main outcome measures
Recurrence of depression (MADRS total score ≥ 22 confirmed after 3 to 7 days); time to recurrence.

Main results
One third of people receiving citalopram had recurrent depression compared to two thirds receiving placebo. Time to recurrence was significantly longer in the citalopram group (hazard ratio citalopram v placebo 0.32, 95% CI 0.19 to 0.56). The estimated proportion recurrence-free at 48 weeks was 67% for citalopram and 27% for placebo (p < 0.0001). Citalopram was well tolerated, although back pain and influenza-like symptoms were more common than in the placebo group. The study was not powered to analyse dose-response relationships.

Conclusions
Long-term treatment with citalopram prevents recurrence of depression in the elderly and is well tolerated.

Adverse events experienced by elderly people with major depression treated with citalopram or placebo

<table>
<thead>
<tr>
<th>Adverse events</th>
<th>Citalopram</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20-40mg/day</td>
<td></td>
</tr>
<tr>
<td><strong>Fatigue</strong></td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td><strong>Influenza-like symptoms</strong></td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td><strong>Back pain</strong></td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td><strong>Traumatic injury</strong></td>
<td>12</td>
<td>7</td>
</tr>
</tbody>
</table>

COMMENTARY
Several studies have found antidepressants to be effective in the secondary prophylaxis of depression in young and middle-aged people, however only a few maintenance studies have been conducted with elderly participants. Klysner et al investigated the efficacy of citalopram for preventing recurrence of depression in elderly people with unipolar major depression. This is the first study using a 3-phase design to investigate treatment with a serotonin reuptake inhibitor for the prophylaxis of recurrent depression in the elderly.

The treatment effect is the same as in younger patients. This is interesting because elderly people may take longer to respond to treatment and have earlier recurrence. Prophylactic treatment was also effective in people with only one previous depressive episode. This suggests that clinicians should follow-up after anti-depressive medication is discontinued and that long-term treatment with an anti-depressive drug should be considered after the first depressive episode in elderly people.

Björn Appelberg, MD PhD
Department of Psychiatry
University of Helsinki, Finland