Three-year outcome of Galantamine treatment in Alzheimer’s disease in a routine clinical setting.

Wallin, Åsa; Wattmo, Carina; Minthon, Lennart

2007

Document Version:
Publisher's PDF, also known as Version of record

Link to publication

Citation for published version (APA):

General rights
Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.
• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.
Background
Alzheimer’s disease (AD) is the major cause of dementia and one of the major predictors of death in the elderly. AD is characterized by a progressive loss of cognitive and practical abilities. Multiple double blind, placebo controlled studies have demonstrated beneficial effects of galantamine treatment on cognition and function in the short-term. Outcomes in long-term treatment in a routine clinical setting has not been investigated.

The Swedish Alzheimer Treatment Study (SATS) is an ongoing, prospective, longitudinal, multicenter study evaluating cholinesterase inhibitor (CHEI) treatment in AD. Patients are investigated at baseline, at 2 months and every 6 months for a total period of three years.

Objectives
To describe and evaluate the three-year outcome on cognition (MMSE, ADAS-cog) and global rating (CIBIC) of galantamine treatment in Alzheimer’s disease (AD) in a routine clinical setting. To evaluate dropout.

Methods and Subjects
The first 143 patients receiving galantamine in the SATS for three years were investigated in this study. Patients were assessed with MMSE, ADAS-cog (0-70) and global rating (CIBIC). MMSE and ADAS-cog mean values over time were investigated as well as the change in the scales from baseline. The outcome of the ADAS-cog was compared to a mathematical model of change in untreated AD-patients using the Stern equation (1). The individual rate of change in ADAS-cog was calculated for each individual and described graphically. The expected decline based on previously reported rates of change in untreated patients was estimated to 2-4 points/year in MMSE and 4-9 points/year in ADAS-cog (1-3). Three groups of response were defined at each interval. CIBIC 1-3 was better, 4 unchanged and 5-7 worse. The reason for dropout was monitored.

Table 1. Baseline characteristics

| Patients(n) | 143 |
| Gender (male/female) | 64/79 |
| Age, mean ± SD years | 72.5 ± 8.1 |
| MMSE, mean ± SD | 23.1 ± 4.3 |
| ADAS-cog (0-70), mean ± SD | 17.2 ± 9.0 |

Table 2. Reason for dropout

<table>
<thead>
<tr>
<th>Reason for dropout</th>
<th>Patients withdrawing from study (n=71)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hematological side</td>
<td>22 (31%)</td>
</tr>
<tr>
<td>Nursing home admission</td>
<td>9 (13%)</td>
</tr>
<tr>
<td>Withdrawal of consent</td>
<td>5 (7%)</td>
</tr>
<tr>
<td>Death</td>
<td>5 (7%)</td>
</tr>
<tr>
<td>Change to other CHEI</td>
<td>4 (6%)</td>
</tr>
<tr>
<td>Other reasons</td>
<td>6 (8%)</td>
</tr>
</tbody>
</table>

Conclusion
Long-term galantamine treatment in a routine clinical setting was safe and resulted in a positive effect in cognitive tests compared to historical controls and mathematical models. After 3 years of treatment a positive global outcome was observed in more than 40% of the patients. Dropout was less than expected.

Results
The mean galantamine dose was 15.6-19.6 mg/day.

Reference List