TITLE: Use of Gabapentin as an Anxiolytic: Clinical Effectiveness and Guidelines

DATE: 08 February 2010

RESEARCH QUESTIONS:

1. What is the clinical effectiveness of gabapentin as an anxiolytic?

2. What are the evidence-based guidelines for use of gabapentin as an anxiolytic?

METHODS:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 1, 2010), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international health technology agencies, and a focused Internet search. The search was limited to English language articles published between 2005 and January 2010. Filters were applied to limit the retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials (RCTs), controlled clinical trials, and guidelines. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

RESULTS:

HTIS reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by RCTs, controlled clinical trials, and evidence-based guidelines.

Three RCTs and four guidelines were identified regarding the use of gabapentin as an anxiolytic. No health technology assessments, systematic reviews, meta-analyses, or controlled clinical trials were identified. Additional information that may be of interest has been included in the appendix.
OVERALL SUMMARY OF FINDINGS:

One RCT examining preoperative anxiety in knee surgery patients reported that preoperative anxiety scores decreased when patients were premedicated with 1200 mg gabapentin compared to placebo. Two other RCTs reported the effects of gabapentin in specific anxiety disorders. One compared the use of fluoxetine to the co-administration of gabapentin and fluoxetine in patients with obsessive compulsive disorder. The addition of gabapentin improved obsessive symptoms at two weeks, with no significant difference at four, six, or eight weeks. The third RCT compared the ability of a 14-day course of propranolol, gabapentin, or placebo to prevent posttraumatic stress disorder in patients with acute physical injury. Neither propranolol nor gabapentin showed a significant benefit over placebo on posttraumatic stress symptoms.

Gabapentin is listed as a treatment option for certain anxiety disorders in American, Australian, Canadian, and British guidelines, typically as a second or third line treatment (see Table 1). Complete details on the recommendations are provided in the full text guidelines.

Table 1: Recommendations regarding when to use gabapentin as an anxiolytic

<table>
<thead>
<tr>
<th>Guideline (year)</th>
<th>Obsessive-Compulsive Disorder</th>
<th>Panic Disorder</th>
<th>Posttraumatic Stress Disorder</th>
<th>Social Anxiety Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Psychiatric Association (2009)</td>
<td>Not reported</td>
<td>Based on individual circumstances</td>
<td>Not reported</td>
<td>Not reported</td>
</tr>
<tr>
<td>Western Australian Psychotropic Drugs Committee (2008)</td>
<td>Not reported</td>
<td>For incomplete responders</td>
<td>Not reported</td>
<td>Second line</td>
</tr>
<tr>
<td>Canadian Psychiatric Association (2006)</td>
<td>Third line adjunctive</td>
<td>Third line</td>
<td>Third line adjunctive</td>
<td>Second line</td>
</tr>
<tr>
<td>British Association for Psychopharmacology (2005)</td>
<td>Not reported</td>
<td>Not reported</td>
<td>Not reported</td>
<td>Acute treatment</td>
</tr>
</tbody>
</table>

Limited RCT evidence was identified on the effectiveness of gabapentin as an anxiolytic. The identified evidence from the past five years suggests gabapentin may decrease preoperative anxiety and accelerate the anti-obsessive effects of fluoxetine. Identified evidence-based guidelines on anxiety disorders recommend the use of gabapentin as a second or third line treatment choice for specific anxiety disorders.
REFERENCES SUMMARIZED:

Health technology assessments
No literature identified.

Systematic reviews and meta-analyses
Not literature identified.

Randomized controlled trials


Controlled clinical trials
No literature identified.

Guidelines and recommendations

See pages 12, 13, 38, 60.

See page 11 for use in social anxiety disorder, and page 12 for use in panic disorder.

See page 19S for recommended dose, pages 26S-28S for use in panic disorder, pages


See page 575 for adverse effects, interactions and other specific problems, and pages 581-583 for use in social phobia.

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APPENDIX – FURTHER INFORMATION:

Systematic Reviews and meta-analysis – anxiety as secondary outcome


Randomized controlled trials – anxiety as secondary outcome


Controlled clinical trials – anxiety as secondary outcome


Review articles


Additional references