The prescribing of laxatives alongside Clozapine: a trust-wide audit

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Background

Since the introduction of clozapine, several guidelines and recommendations have been developed to encourage safe practice; this audit will look at these alongside trust-wide adherence within the Birmingham & Solihull Mental Health NHS Foundation Trust.

Clozapine is an antipsychotic medication used as a gold-standard treatment for those with treatment-resistant schizophrenia (TRS) and is associated with a large adverse effect profile. Schizophrenia affects over 23 million people worldwide, and a third of these will encounter TRS.

Clinical attention has been drawn to clozapine-induced constipation mortality in recent years, calling for adherence to guideline recommendations of laxative administration. It has been suggested that the mortality in clozapine patients is higher from constipation than the wider recognised agranulocytosis.

Being that adverse side effects are the main reason for patient discontinuation of the drug, it is important that these, potentially preventable, issues are recognised and managed promptly upon clozapine initiation.

Aims & Objectives

- To determine trust wide adherence to multiple guidelines in regards to laxative administration alongside clozapine use
- To ensure safe and effective use of clozapine
- To review any discrepancies in management of gastrointestinal symptoms in patients with schizophrenia

Methodology

- Protocol approved by Warwick University BSREC and Trust Audit Approval Committee
- Studies and current guidelines collected via online access and direct request
- Trust pharmacological records processed and anonymised
- Patients receiving clozapine were extracted and classed by laxative use using encrypted data processing software
- 821 patients were viable for inclusion

Data Analysis 1 month

- Relevant medication information extracted
- A target compliance of 85% has been set
- No exceptions to non-compliance shall be considered in this audit

Results

<table>
<thead>
<tr>
<th>Guideline</th>
<th>Criteria of adherence</th>
<th>Met?</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zapanex manufacturer guidelines</td>
<td>Review and treat current constipation before clozapine initiation</td>
<td>No</td>
<td>19% (n=154)</td>
</tr>
<tr>
<td>Regional Trust guidelines</td>
<td>Minimum of osmotic laxative for routine use alongside clozapine</td>
<td>No</td>
<td>26% (n=217)</td>
</tr>
<tr>
<td>Maudsley Psychiatric guidelines 2018</td>
<td>Both stimulant and stool softener should be used alongside clozapine</td>
<td>No</td>
<td>7% (n=60)</td>
</tr>
</tbody>
</table>

- Standards do not meet the 85% minimum compliance
- Compliance has increased through time
- Patients on a higher dose were 2x more likely to show guideline adherence

Analysis

✓ Areas of good practice

- 42% of patients were provided with a laxative
- Results show improvement in comparison to similar previous studies

✗ Areas for improvement

- Standards do not meet compliance
- 4% of patients received contraindicated bulk laxatives
- 23% were not provided with a laxative until after 12 months

Conclusion

Poor guideline adherence shows that more attention is urgently required toward correct monitoring and follow up of patients on clozapine. A lack of literature supporting the ideal treatment regime reflects the need to develop universal guidelines, which should be supported by evidence based studies.

Professionals need support in order to improve collaboration across health services in order to maximise patient safety. Further audits are required in the health sector to ensure guideline adherence.

Bibliography


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