DISCONTINUATION OF PROTON PUMP INHIBITORS DURING HOSPITALISATION: A RANDOMISED CONTROLLED TRIAL

Background

- Too many patients take proton pump inhibitors (PPIs) without indication (1,2).
- There are side effects to long term PPI treatment (3).
- No previous studies have examined whether it is possible to reduce or discontinue treatment during hospitalization and continue it successfully after discharge.

Aim

- The aim of the study is to investigate if PPIs can be discontinued or reduced through counselling by pharmacy staff during hospitalisation.
- In addition, it is investigated whether dose reduction and/or discontinuation affects symptoms, number of readmissions and quality of life.

Materials and methods

- Patients at the Emergency and Medical Departments at Randers Regional Hospital, were randomized into 2 groups, intervention and control group.

Results

- 31 adults were included. 4 withdrew from the investigation at their own request or because they could not be reached on follow-up telephone calls.
- Baseline characteristics showed no statistically significant difference between intervention and the control group in terms of age, gender, number of drugs, symptoms, number of readmissions or quality of life.

<table>
<thead>
<tr>
<th>Group</th>
<th>Intervention</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No dose reduction or discontinuation</td>
<td>4</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Dose reduction or discontinuation</td>
<td>9</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>14</td>
<td>27</td>
</tr>
</tbody>
</table>

The proportion of patients who successfully discontinued or reduced their use of PPI was 69.2% (CI95%: 38.6-90.9%) (9 in 13 patients) in the intervention group compared to 7.1% (CI95%:0.2-33.9) (1 in 14 patients) in the control group.

The difference between groups was statistically significant (p=0.001).

Conclusion

- The primary outcome was the proportion of patients who successfully discontinued or reduced their use of PPI after counselling by the pharmacy staff.
- Statistically significantly more patients discontinued or reduced their use of PPI after counselling by the pharmacy staff.
- Dose reduction and/or discontinuation did not affect symptoms, number of readmissions and quality of life.
- The pharmacy staff was capable of identifying patients for whom PPI dose reduction or discontinuation was relevant and performing a successful counselling on discontinuation or reduction of the use of PPIs.

References: