Preventing co-prescription of non-steroidal anti-inflammatory drugs and selective serotonin re-uptake inhibitors in primary care

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Introduction

A patient of Aultbea and Gairloch Medical Practice – a general practice surgery in the Scottish Highlands – passed away from an upper gastrointestinal haemorrhage. She had been on repeat prescriptions of both an SSRI and an NSAID, medications which interact to increase the risk of upper GI haemorrhage (1). She had been prescribed gastroprotection in accordance with NICE guidelines (2) in the form of a proton pump inhibitor but was non-adherent.

The practice felt her death was preventable and that procedures must be developed to prevent future adverse events caused by this interaction.

Methods

- We searched the practice electronic patient records system to identify all patients with active repeat prescriptions of both SSRIs and NSAIDs (including aspirin).
- We developed a proforma (see table) to assess whether there was a valid indication for both drugs and whether the patient was co-prescribed gastroprotection.
- We attempted to assess adherence by looking at the regularity with which scripts were issued over the past six months.

Results

Nine out of approximately 2300 patients had active repeat prescriptions of both and SSRI and an NSAID. All but one had valid coded indications for both.

Our concerning finding was that only four were co-prescribed gastroprotection.

One patient had no issued scripts for their NSAID over the last six months suggesting non-adherence. All those taking gastroprotection had scripts issued regularly.

<table>
<thead>
<tr>
<th>Patients taking concomitant SSRIs and NSAIDs must have:</th>
<th>Target</th>
<th>No. patients compliant (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coded indication for SSRI</td>
<td>100%</td>
<td>8 (89%)</td>
</tr>
<tr>
<td>Coded indication for NSAID (and/or aspirin)</td>
<td>100%</td>
<td>8 (89%)</td>
</tr>
<tr>
<td>Co-prescription of gastroprotection (PPI or misoprostol)</td>
<td>100%</td>
<td>4 (44%)</td>
</tr>
</tbody>
</table>

Actions

- All patients had a medication review; in six the combination of SSRI and NSAID was not deemed the most suitable treatment and one or both were stopped or changed. A PPI was prescribed for the other three.
- An automated reminder was set up on the electronic prescribing system to warn of the interaction at the time of prescription and advise alternatives or co-prescription of a PPI.
- Evidence based-measures to improve adherence with gastroprotection were instigated: explanation at time of prescription, development of written information and regular medication review.

The main limitations were our crude assessment of adherence and not including patients taking COX-2 inhibitors in our search.

Conclusion

- We highlight the risks of co-prescription of SSRIs and NSAIDs, the importance of co-prescription and adherence with gastroprotection.
- We instigated changes to try to prevent this prescribing error; our work is ongoing and we are re-auditing in six months to evaluate efficacy of changes.

References