Upper gastrointestinal bleeding - re-prescribing of associated drugs

Document as included in MAW

A study has found that, in the year after being discharged from hospital following a drug-related upper gastrointestinal bleed, between 25% (for NSAIDs) and 82% (for SSRIs) of people redeemed a prescription for the drug that was associated with that bleed. Proton pump inhibitors were generally, but by no means always, co-prescribed. Prescribers should follow NICE guidance on the prevention of re-bleeding in patients on NSAIDs, aspirin or clopidogrel and also take note of advice in the BNF on the risks of gastrointestinal bleeds with SSRIS and other drugs.

Overview and current advice

NICE guidance on acute upper gastrointestinal (GI) bleeding (Clinical guideline 141) gives advice on control of bleeding and prevention of re-bleeding in patients on NSAIDs, aspirin or clopidogrel.

According to NICE guidance, a proton pump inhibitor (PPI) should routinely be co-prescribed with an NSAID (including coxibs) for anyone with osteoarthritis (Clinical guideline 59) or rheumatoid arthritis (Clinical guideline 79), and anyone 45 years of age and older with chronic low back pain (Clinical guideline 88). Prescribers should choose the PPI with the lowest acquisition cost.

NSAIDs, low-dose aspirin, anticoagulants (warfarin and other vitamin K antagonists), clopidogrel, dipyridamole and SSRIs are associated with upper GI bleeding. There are limited data on the extent to which they are re-prescribed in people who have been discharged from hospital following a bleeding episode related to one of these drugs.

New evidence

This study used 3 Danish data sources to assess whether drugs associated with upper GI bleeding were re-prescribed after an episode of upper GI bleeding, and whether PPIs were co-prescribed for gastroprotection.
Of 3652 people who were admitted to hospital with an upper GI bleed, 1890 were using a drug associated with upper GI bleeding at the time of admission. Of these, 64% were taking NSAIDs, 33% were taking low-dose aspirin, 20% were taking SSRIs, 9% were taking anticoagulants, 8% were taking dipyridamole and 3% were taking clopidogre\textsuperscript{1}.

After discharge, some drug classes were re-introduced more slowly than others. At 3 months after discharge, only 11% of former NSAID users and 20% of former low-dose aspirin users had restarted their prescriptions for these drugs, whereas 55% of former dipyridamole users and 60% of former SSRI users had restarted their drugs\textsuperscript{1}.

One year after discharge, 25% of NSAID users, 43% of low-dose aspirin users, 55% of clopidogrel users, 68% of anticoagulant users, 71% of dipyridamole users and 82% of SSRI users had redeemed a new prescription for that drug. PPIs were generally, but by no means always, co-prescribed (SSRIs 75%, clopidogrel 83%, dipyridamole 94%, low-dose aspirin 95%, NSAIDs 97%, anticoagulants 99%)\textsuperscript{1}.

The study has limitations. Observational studies are subject to bias and confounding. For example, in this study it is not known how many people took their treatment as intended or how many bought over-the-counter aspirin or NSAIDs. The study was undertaken in Denmark where practice may differ from that in the UK. The population studied was elderly (mean age 75 years) and therefore may have been at high risk of bleeding.

It is unclear how many patients were taking more than one drug associated with upper GI bleeding, which combinations of drug were taken (for example, low-dose aspirin plus clopidogrel or dipyridamole), and how this might affect the findings. It is also not known how many of the upper GI bleeds seen were actually caused by the drug and how many would have occurred irrespective of the drug.

**Commentary**

**Commentary provided by Narinder Bhalla, MRPharmS, Consultant Pharmacist - Medication Safety, Cambridge University Hospitals NHS Foundation Trust:**

Despite the limitations of this study, it provides useful and reassuring information on the use of some drugs that are most often associated with upper GI bleeding, suggesting that clinicians are generally aware of the risks. However, it also provides some less reassuring data around other drugs, particularly SSRIs, which were re-prescribed relatively quickly after discharge. In patients who had previously experienced a drug-related upper GI bleed, 82% of patients who had been on an SSRI prior to admission to hospital were re-prescribed this class of agent within 12 months of discharge.

Re-prescribing rates of drugs without concomitant proton pump inhibitor as GI cover were generally low. However, 25% of patients re-prescribed an SSRI were not given a PPI, compared with less than 5% for NSAIDs, low-dose aspirin or anticoagulants. This might be because prescribers are less aware of the bleeding risks of SSRIs, compared with other drug classes.

In patients who have experienced drug-related upper GI bleeding, the reintroduction of a drug and the extent of co-prescribing with a PPI are likely to be determined by several factors, including the awareness of the bleeding risk associated with the drug class and the clinical need for the drug. This study appears to show a rational approach to re-prescribing, at least for some drugs. For example, the slow reintroduction of NSAIDs suggests that NSAIDs were not always considered essential. This is in contrast to anticoagulants where reintroduction was faster, suggesting that these were considered vital treatment options for patients. In addition, the high level of PPI co-prescribing with NSAIDs and anticoagulants suggests that there was a high awareness of bleeding risk when drugs are re-prescribed.
References

About this Medicines Evidence Commentary
Medicines Evidence Commentaries form part of NICE’s Medicines Awareness Service and help contextualise important new evidence, highlighting areas that could signal a change in clinical practice. They do not constitute formal NICE guidance. The opinions of contributors do not necessarily reflect the views of NICE.

Visit Evidence Search

Copyright © 2013 National Institute for Health and Care Excellence. All Rights Reserved.