## NORTHERN IRELAND MEDICINES MANAGEMENT





# **Supplement: Key Issues in Gastrointestinal Prescribing**

## Meetings with local gastroenterologists

Representatives of the HSCB Pharmacy and Medicines Management team have recently met with gastroenterologists in all of the local trusts to advise them of the continued work in primary care in relation to gastrointestinal (GI) prescribing and to seek their support to work collaboratively with us to achieve these aims in secondary care and across the primary/secondary care interface.

This supplement describes some of the issues that were highlighted.

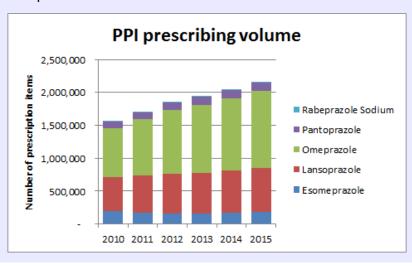
## PPIs: a growing problem

It is estimated that 12% of the population of Northern Ireland (NI) are currently prescribed a proton pump inhibitor (PPI). This is despite recent studies on PPIs that have found:

- 1. Postmenopausal women who were previous or current smokers and who regularly used PPIs for more than two years had an increased risk of low-trauma hip fracture.
- 2. Hospital inpatients taking daily PPIs had an increased risk of developing diarrhoea associated with Clostridium difficile.
- 3. There may be an increase in the risk of hip, wrist, or spine fracture, especially if PPIs are used in high doses and over long durations (>1 year). The increased risk was observed mainly in elderly patients.
- 4. Prolonged use of PPIs has been associated with hypomagnesaemia. Caution is required especially in patients who will take a PPI concomitantly with digoxin or drugs that may cause hypomagnesaemia, for example diuretics.
- 5. Proton pump inhibitors can cause interstitial nephritis and are an underappreciated cause of acute kidney injury.

### **Action for healthcare professionals**

- Prescribers should review patients on PPIs regularly to ensure medication is not continued beyond therapeutic need and to minimise risk of side-effects.
- Prescribers should add to directions, instructions for step-down or step-off e.g. "take one daily until 31st August 2016 and then stop".
- Community pharmacists should query PPI prescriptions with the prescriber which have been issued after a specified stop date.



## PPIs: missed opportunities for potential efficiencies

During the last 12 months a number of opportunities have been missed for potential efficiencies in relation to PPI prescribing in primary care (see table below). In Northern Ireland we spend approximately 44% more on PPIs per head of population compared with Wales.

Prescribed drug	Preferred drug	Potential efficiency for 2016 / 17 in NI	
Esomeprazole 20mg	Omeprazole (2x20mg)	£1,750,000	
Omeprazole tablets	Omeprazole capsules	£130,000	
Nexium <sup>®</sup> tablets	Esomeprazole tablets	£366,000	
Omeprazole 40mg	Omeprazole 20mg capsules x 2	£95,000	

## Omeprazole suspension

When omeprazole suspension is prescribed it has to be ordered from a 'specials' manufacturer as an unlicensed preparation and costs can vary greatly, e.g. omeprazole 10mg/5ml oral suspension price can range from £42 to £1664. During the last 12 months approx. £800,000 has been spent on omeprazole suspension across NI. In the majority of cases omeprazole and lansoprazole orodispersible tablets, which are licensed products, are the preferred choice for patients (both children and adults) who cannot swallow the oral capsules. Further information is available in the



Medicines Management Newsletter Supplement Anti-secretory Drugs in Children (updated 2016).

#### **Action for community pharmacists**

Community pharmacists should consider informing the prescriber of the cost of omeprazole suspension compared to orodispersible tablets. If the suspension continues to be prescribed please consider checking alternative suppliers for cost-effective prices. Further information is available in the 'Specials' section of the NI Formulary website <a href="http://niformulary.hscni.net">http://niformulary.hscni.net</a>.

### Twice daily PPIs - don't forget to review and step-down / off

GPs have reported a growing trend for PPIs to be prescribed as a twice daily (BD) dose. It is estimated that approx. £74,000 per month is spent on BD PPIs to an average of 56 patients per GP practice. In most cases this will tend to be an initial short-term dosing schedule to allow healing, e.g. following severe oesophagitis, oesophageal stricture dilation and in many cases the dose will be suitable for step-down and in some cases discontinued.



Local gastroenterologists have agreed to look at communication templates and identify opportunities to be more specific about timescales relating to higher doses.

#### **Action for GPs**

- Follow advice from specialists regarding higher doses and appropriate duration.
- Ensure higher doses are not added to "repeat" screen if only required for a specific period.
- Ensure regular review of PPIs, particularly those patients on high doses.
- See SOPs on primary care intranet for how to switch or step-down PPIs.

## PPIs prescribed for gastroprotection

One of the main reasons for the increase in PPI volume appears to be greater awareness of the need for gastroprotection, particularly in relation to oral NSAIDs and antiplatelets. But when is gastroprotection required? Advice in relation to this question can be found in a previous article on this topic in the <a href="February 2016">February 2016</a> edition of the Medicines Management Newsletter.



## **Action for GPs**

- To aid medication review and to ensure that PPIs aren't continued beyond therapeutic need it is recommended that, when co-prescribing with NSAIDs or antiplatelets for gastroprotection, this is made clear within the directions, e.g. "take one daily while taking ibuprofen".
- Licensed doses of PPIs for gastroprotection are ONCE daily. See CKS for dosing information.

## **Action for community pharmacists**

Community pharmacists should query PPI prescriptions with the prescriber which have been issued
with directions clearly intended for gastroprotection but where NSAIDs or antiplatelets have not
been prescribed or appear to have been stopped.

### PPIs and risk of C. Difficile

Whilst a causal link has not been established, there is increasing evidence that there is an association between use of proton pump inhibitors (PPIs) and *C. difficile* infection.

### **Action for GPs**

- Stop PPIs if possible when a broad spectrum antibiotic is commenced.
- Review the need for PPIs in patients with or at high risk of *C. difficile* infection.
- Refer to <u>NI Management of Infection Guidelines for Primary Care 2016</u> for more information.



## **Action for community pharmacists**

• Community pharmacists should query with the prescriber any prescriptions for broad spectrum antibiotics, especially cephalosporins, quinolones, co-amoxiclav and clindamycin, for all patients >65years who take PPIs.

### Probiotics – when can I prescribe on NHS?

Probiotics are not licensed medicines and are associated with limited evidence. The only time a probiotic should be issued on an NHS script is the preparation VSL#3<sup>®</sup> under the supervision of a physician, for the maintenance of remission of ileoanal pouchitis induced by antibacterials in adults. In all other circumstances, e.g. traveller's diarrhoea, antibiotic associated diarrhoea, our advice is not to prescribe on the NHS but patients can be directed to purchase OTC. Further information on the limited evidence associated with probiotics is available in the March 2015 edition of the Medicines Management Newsletter.



#### **Action for GPs**

 Probiotics should not be prescribed unless VSL#3<sup>®</sup> for the maintenance of remission of ileoanal pouchitis induced by antibacterials in adults.

## Cost-effective choices in gastrointestinal prescribing

During 2016 / 17, efficiencies of > £500,000 are planned in other areas of GI prescribing. Details of the planned savings are detailed in the table below.

#### **Action for GPs**

- Review current prescribing practice to ensure that preferred choices are selected as first-line options.
- Maximise prescribing potential of preferred choices by utilising clinical system software to add drug defaults, highlight preferred choices etc.
- Identify opportunities to switch to preferred drugs.



Therapeutic area	Current drug	Preferred drug	Potential savings	
Alginates / antacids	Gaviscon <sup>®</sup> , Gaviscon Advance <sup>®</sup> , Maalox <sup>®</sup>	*Peptac <sup>®</sup>	£155,000 (25% switch) rate)	
Antispasmodics	Dicycloverine, Merbentyl <sup>®</sup>	*Mebeverine 135mg tablet	£57,000 (25% switch rate)	
Antidiarrhoeals	Loperamide orodispersible	*Loperamide capsules	£39,000 (90% switch rate)	
Osmotic laxatives	Movicol® sachets (adult)	**Laxido® sachets	£65,000 (50% switch rate)	
Oral aminosalicylates	Mesalazine MR 400mg and 800mg, Asacol®	*Octasa <sup>®</sup> MR 400mg and 800mg	£130,000 (30% switch rate)	
Haemorrhoidal preparations	Proctosedyl <sup>®</sup> ointment	**Uniroid HC <sup>®</sup> ointment, *Anusol HC <sup>®</sup> ointment	£24,000 (50% switch rate)	
*First line NI Formulary choices				

<sup>\*</sup>First-line NI Formulary choices

#### References

- 1. BSO/HSCB. BSO Prescribing data / number of items for PPIs, 2014.
- 2. HSCB. Northern Ireland Formulary, <a href="http://niformulary.hscni.net">http://niformulary.hscni.net</a>
- 3. BMA / RPSGB. BNF, June 2016. https://www.evidence.nhs.uk/formulary/bnf/current
- 4. CKS. NSAIDs prescribing issues. July 2015
- 5. CKS. Antiplatelet treatment. October 2015
- 6. UKMi. Clostridium difficile infection is use of Proton Pump Inhibitors a risk factor? UKMi Q&A 244.3, 2015. https://www.evidence.nhs.uk
- 7. CKS. Diarrhoea antibiotic associated. Last updated June 2013.

This newsletter has been produced for GP practice staff and pharmacists by the Regional Pharmacy and Medicines Management Team. If you have any queries or require further information on the contents of this newsletter, please contact one of the Pharmacy Advisors in your local HSCB office:

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<sup>\*\*</sup>Second-line NI Formulary choices