Prescribing Bulletin

July 2011

Contributions for future editions are very welcome as well as constructive feedback on content. The Editorial Team is particularly keen to receive further prescribing efficiency ideas which can be shared with all prescribers.

Contents:

Clostridium difficile **infection in the Community**

(contribution from Dr Ed James, Consultant Microbiologist)

Tackling *Clostridium difficile* infection (CDI) is a priority for NHS Boards in Scotland. Efforts have focused on improving infection control and antimicrobial stewardship in hospitals and has been associated with significant reductions in CDI. However a significant minority of cases of CDI originate from patients' homes or other community settings where implementation of infection control measures is not applicable and the focus should be on reducing the use of antibiotics associated with a high risk of CDI, particularly in the elderly and those recently discharged from hospital.

The Scottish Antimicrobial Prescribing Group (SAPG) has put together the following key messages regarding CDI in the community setting.

Key messages for General Practitioners re *Clostridium difficile* infection (CDI)

Patients recently discharged from hospital (within the last 12 weeks) are most at risk of developing CDI but it can develop in individuals who have not been in hospital. Up to 20% of cases of CDI present in the community setting in the patient's own home or in care homes.

The majority of cases occur in those aged 50 years and over but it can occur in any age group.

Antibiotic use is the greatest risk factor for CDI, particularly use of broad spectrum agents such as co-amoxiclav, cephalosporins, quinolones (including ciprofloxacin) and clindamycin.

Stool samples should be sent to the laboratory for CDI toxin testing when patients present with diarrhoea and risk factors for CDI e.g. age > 50, recent antibiotics, recent hospitalisation, proton pump inhibitor use.

In NHS Borders a multi-step protocol is in use for laboratory detection of *C.difficile* toxin. An initial screening test for the presence of the organism is followed by an immunoassay for *C difficile* toxin in positives. Samples which are negative in the immunoassay are cultured for *C difficile* and any recovered isolate tested for toxin production itself.

The Scottish Antimicrobial Prescribing Group (SAPG) is a national clinical multi-disciplinary forum hosted by the Scottish Medicines Consortium. The primary objective is to co-ordinate and deliver a national framework for antimicrobial stewardship to enhance the quality of antimicrobial prescribing and management in Scotland.

http://www.scottishmedicines.org.uk/SAPG/Scottish Antimicrobial Prescribing Group SAPG

Swabs, antimicrobials and leg ulcers

SIGN guideline 120 which deals with venous leg ulcers was updated in August 2010 and together with HPA primary care reference guide, provides useful information on microbiological sampling and systemic and topical antimicrobials.

Swabbing leg ulcers

Most leg ulcers will be colonised with bacteria commonly Staph aureus, Group G streptococci, coliforms or Pseudomonas. The presence of any particular bacteria does not imply infection in the absence of clinical signs and of itself is not an indication for treatment, with the possible exception of Group A streptococcus (Strepyogenes) which is uncommon.

Bacteriological swabs should therefore be taken only when there is clinical evidence of infection such as increase in pain or size of ulcer, cellulitis or pyrexia. When sampling, take the swab after superficial slough and debris have been removed and the ulcer cleaned with water to remove surface contamination. Take the swab from infected-looking viable tissue while rotating it.

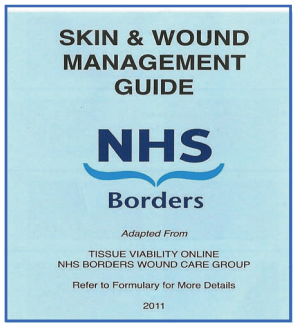
Antimicrobial dressings

SIGN guideline 120 reviewed silver and honey dressings for leg ulcers and concluded that these are not indicated as routine dressings due to lack of supporting evidence.
NHS Borders spend on these products, and on silver in particular, increased throughout 2010. Silver dressings are now designated as 'specialist use only.' Separate information has been circulated from Elaine Peace as Chair of the NHS Borders Wound Care Group with additional information to be circulated shortly regarding authorisation for use for specific patients. Prescribing and ordering of silver products will be closely monitored in primary and secondary care. Prescribers and users are asked to review use of these products in conjunction with this guidance.

Antibiotics

If there is clinical evidence of infection, flucloxacillin or clarithromycin if penicillin allergic, should be used in the first instance. If there is no clinical response, the antibiotic may be modified in the light of culture results. If there is a clinical response to this, it is reasonable to continue even if culture results reveal an organism resistant to this as coliforms or Pseudomonas may obscure gram positive organisms. Normal duration of treatment is seven days. Increase in odour alone, without other signs of infection, may respond to topical metronidazole. This should be prescribed as the brand Anabact gel which contains metronidazole 0.75%, as per the local formulary, to ensure that the most appropriately licensed and cost effective product is provided.

Skin and Wound Management Guide



NHS Borders Wound Care Group has recently issued an updated publication entitled 'Skin and Wound Management Guide' which details the latest BJF Wound Care recommendations by product category and also brand name of product to assist prescribers and Pharmacy staff. Copies can be requested from Maggie Czajka/Fiona Jackson in the P&CS office on 01896 825508 or by email. The guide also includes useful contact numbers as well as information on barrier products and a wound assessment guide adapted from Tissue Viability Online which is another useful resource:

http://www.healthcareimprovementscotland.org/programmes/patient_safety/tissue_viability.aspx

Gauze swabs: Basic wound care tip:

Please review use and prescribing of gauze swabs in your area of practice. Guaze swabs should NOT be used for safety and cost reasons.
If your patient requires a swab, please prescribe the NON-WOVEN type-either as non–sterile (78p/10cm^2/pack of 100) or sterile (25p/7.5cm^2/pack of 5), depending on reason for use.

Prescribing of gauze swabs in error costs NHS Borders £4000 each year as well as risking fibrous deposits in wounds.

Reminder—Preventing fatalities from medication loading doses

NPSA 2010/RRR018(Rapid Response Report)
All prescribers and pharmacists should maintain a low threshold for challenging doses which appear high/abnormal i.e. when loading doses may have been continued in error

Examples:
•Doses of digoxin greater than 250 microgram daily in adults and greater than 125microgram in people over 70 years of age should rarely be seen.

•Amiodarone doses higher than 200mg daily should be queried (the maximum licensed dose for maintenance is 200mg).

•Phenytoin doses greater than 500mg daily should also be very unusual, although there may be wide inter-patient variability in phenytoin serum levels with equivalent dosage, so a wide range of doses is used.

•Warfarin doses may vary considerably between patients. It is advised that any newly initiated therapy at doses greater than 5mg should be considered abnormal in the community. Please also remember to minimise use of the 5mg tablet to reduce errors in prescribing and in tablet selection.

Thank you to Dr Paul Cormie for contributing to this article.

Proton Pump Inhibitor (PPI) Review

Prescribers are reminded to check the reasons for ongoing PPI use with growing evidence of interactions with various drugs, some of which may reduce efficacy of treatments.
Examples continue to be identified of PPIs started for GI protection but not discontinued when NSAIDs are stopped.
If a PPI is stopped, as no longer indicated, patients and prescribers should be aware that rebound acid hyper-secretion is likely which may cause temporary return of dyspeptic symptoms. This is caused by a build up of parietal cell mass which results from high gastrin levels. Patients should be encouraged to persevere for at least one week in the hope that symptoms will resolve before making the decision to start PPIs again.
Thank you to Dr Jonathan Fletcher for contributing to this article.

Respiratory Prescribing

- NHS Borders Asthma and COPD Inhaled Choice Charts are now available on the Intranet under Medical Sub-Specialities/ Respiratory by typing 'Asthma' or 'COPD' into the Intranet Search facility.
- The Inhaled Medicine Choice Charts reflect cost efficient prescribing and evidence based national/local respiratory guidelines.
- Inhaler Instructions have been uploaded to the intranet, and are intended for use as printable instructions for patients within the clinic setting (as well as being a useful reminder for us all).
- NHS Borders Respiratory Prescribing Guidance has been reviewed and revised by the Prescribing Support Pharmacy Team.

Supporting literature or further information can be obtained by contacting:
lynda.taylor@borders.scot.nhs.uk

EMIS Electronic Prescribing System (Primary Care)

EMIS electronic formulary: This has been completed based on the latest updates and is available to EMIS practices to replace any existing formularies via the Prescribing Support Team.
EMIS and contra-indications: These are being applied to all EMIS practice systems. These serve as reminder messages at the point of prescribing and will support the Prescribing Efficiency work to reduce 'slippage' on basic items e.g. a reminder will appear if ramipril tablets are selected rather than the much less costly capsules.

Melatonin for Treatment of Sleep-Wake Cycle Disorders in Children

Recently some prescribers have selected the modified release preparations of Melatonin, rather than the immediate release products approved for use in the shared care protocol and detailed in the Borders Joint Formulary. The shared care protocol is available on the Intranet and was approved by NHS Borders in October 2010.

Preparations Available
The (unlicensed) preparations of Melatonin approved for use in NHS Borders are:

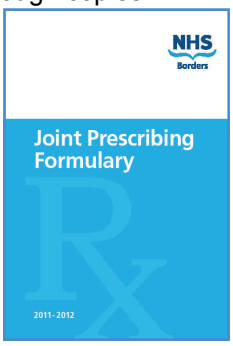
- 3mg immediate release tablets (Bio-melatonin® brand – European licensed product, imported by PharmaNord as the most cost effective supplier)
- 1mg/ml Solution (Kidnaps® brand manufactured and obtained from Special Products Ltd.)

Product brand should be included in the prescription due to variable clinical effects between products**.**

Why not modified release?
Both the shared care protocol, BJF and BNF for Children confirm suitability of unlicensed immediate-release preparations for children, based on expert opinion and experience, with advice against using modified release preparations.
Circadin (melatonin 2mg modified release) is licensed in the UK, only for adults > 55 years of age.

Prescribers should review ALL repeat Circadin prescriptions for appropriateness.

Borders Joint Formulary: The 2011/12 is just published in hard copy and on the NHS Borders intranet. Changes compared with the previous edition will be highlighted soon in a dedicated Prescribing Bulletin. Please ensure that there are enough copies in teams/departments/ practices of this vital prescribing reference source.



Please contact the A & C Team within the Pharmacy on 01896 826604 for extra copies.

High dose Vitamin D3 (colecalciferol)

As covered in the December Prescribing Bulletin, there are some patients who require high dose Vitamin D3 (colecalciferol), to maximize their protection from osteoporosis/or from their treatments and for various reasons do not require/cannot tolerate supplementary calcium.

Availability of these high dose preparations is also increasingly important for those receiving annual zoledronic acid as noted in the Borders Joint Formulary 'recipient letter' May 2011.

Colecalciferol 1000 units as Sunvit D3®, is the most commonly used high dose product and has been approved for use by ADTC for recommendation/initiation by the Osteoporosis team and continuation by GPs.
This is not listed in the BNF and to ensure that pharmacists can source the product, prescribers should ensure that prescriptions state 'colecalciferol 1000 units (Sunvit D3)®'. If pharmacists cannot obtain through normal suppliers, the most cost-effective option is to order through BGH pharmacy. This product will need to be added to GP prescribing systems.

The extra high strength product Dekristol®, 20,000 units colecalciferol, may be indicated for some patients. The required strength for individuals will be clarified by the osteoporosis team.

Tacrolimus: essential brand prescribing

Tacrolimus, an immunosuppressant with a narrow therapeutic index, is used to prevent or treat organ transplant rejection. MHRA Drug Safety Updates (Jan 2009/March 2010) highlighted medication errors due to the unintended switching between different tacrolimus formulations, i.e. immediate release/modified release/granules. Adverse effects have included acute biopsy–confirmed rejection of transplanted organs, increased drug levels and increased creatinine.

Key messages:

Brand prescribing is the safest option for ANY forms of this medication.

- All hospital letters advising of tacrolimus initiation should specify the brand.
- If not specified, GPs should request clarity from the appropriate consultant.
- If any information on brand or strength is missing from prescriptions, pharmacists should contact prescribers to clarify and to ensure that necessary records are corrected.
- A high level of patient/carer awareness of their required brand is essential . They should be advised to immediately query any change in appearance or name of their Tacrolimus medication or if they have any questions about the dose.
- If switching between the different formulations becomes necessary, this should be made only under the close supervision of a transplant specialist.

As more generic immediate release products become available, tertiary centres may review their brand choices but clarity about prescribed products will remain critical to patient safety.

Available products as at June 2011:

PROGRAF capsules	**ADVAGRAF m/r capsules**	**MODIGRAF granules**	**ADOPORT capsules**
Immediate release product for twice daily use, morning and evening.	Modified release product taken once daily in the morning.	Granules used to prepare an immediate release suspension for twice daily use, morning and evening	Immediate release formulation for twice daily use, morning and evening.
SMC approval for restricted use for prophylaxis of heart allograft rejection in all ages of recipients. It is restricted to use in patients where ciclosporin is not suitable.	SMC approval for prophylaxis of kidney and liver allograft rejection + treatment of allograft rejection resistant to treatment with other immuno-suppressive medicinal products in adults only.	SMC approval for restricted use for prophylaxis of kidney,liver and heart allograft rejection + treatment of allograft rejection resistant to treatment with other immuno-suppressive medicinal products in adult and paediatric patients It is restricted to use for those in whom small changes (less than 0.5mg) in dosing increments are required (e.g. in paediatric patients) or seriously ill patients who are unable to swallow tacrolimus capsules.	Not yet considered by SMC

Incident reporting

Who is key to making the NHS as safe as possible?

ANSWER: ***YOU and YOUR TEAMS.***

REMEMBER: ***CORPORATE OBJECTIVE NUMBER 1 FOR NHS BORDERS IS PATIENT SAFETY.***

This message is brought to you as a result of concerns about under-reporting of incidents concerning device failures, adverse drug reactions and near misses in NHS Borders.

It is incumbent upon all prescribers and users of drugs and devices to urgently report any defects in drugs or devices. Line managers should be urgently made aware and all teams should have agreed processes for the next stages of reporting, to improve safety across NHS Borders.

Without this, appropriate feedback will not reach companies and the Regulatory Agencies. This is critical to bringing about improvements and added protection for patients and staff. Without your feedback, identification of emerging trends in side-effects from drugs and faulty devices is not possible. Such reporting may lead to product discontinuation or licensing amendment. YOUR vigilance and responsible reporting are key to these processes.

Actions required

All incidents, which includes product failures which either impact or have the potential to impact, on patient care, MUST be reported via the NHS Borders DATIX system. AND via the following additional pathways:

- Device failures /faulty products should also be reported to the Medicines Healthcare and Regulatory Agency at: http://www.mhra.gov.uk/Safetyinformation/Reportingsafetyproblems/index.htm

- Yellow Card Scotland is the additional route for reporting adverse drug reactions, even those well known for existing drugs such as GI bleed due to NSAIDS- again this helps to identify 'worst offender' drugs and enable action to be taken. http://www.yccscotland.scot.nhs.uk/

- Urgently informing other relevant health professionals via line managers is also vital as such incidents may have impacted on the care of the individual, e.g. may have affected administration of necessary treatments to individuals or to the wider patient population or have the potential to do so. (e.g. cold chain failure due to faulty fridge).

Device failure examples may include: catheter balloon problems, syringe pump failures, early and inappropriate safety feature activation e.g. syringe needle guards.

The impact of incidents and near misses should not be under estimated.
The impact of failure to report an incident also has far reaching consequences.
IT'S YOUR RESPONSIBILITY—IF IN DOUBT, REPORT IT.

MHRA

YellowCard
Helping to make medicines safer

Please contact the NHS Borders Medicines Management and Prescribing Support Team on 01896 827702 with suggestions/ contributions for future editions of our bulletin.

Thank you.