LOTHIAN PRESCRIBING BULLETIN

Supporting prescribing excellence - informing colleagues in primary and secondary care

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In this issue ...

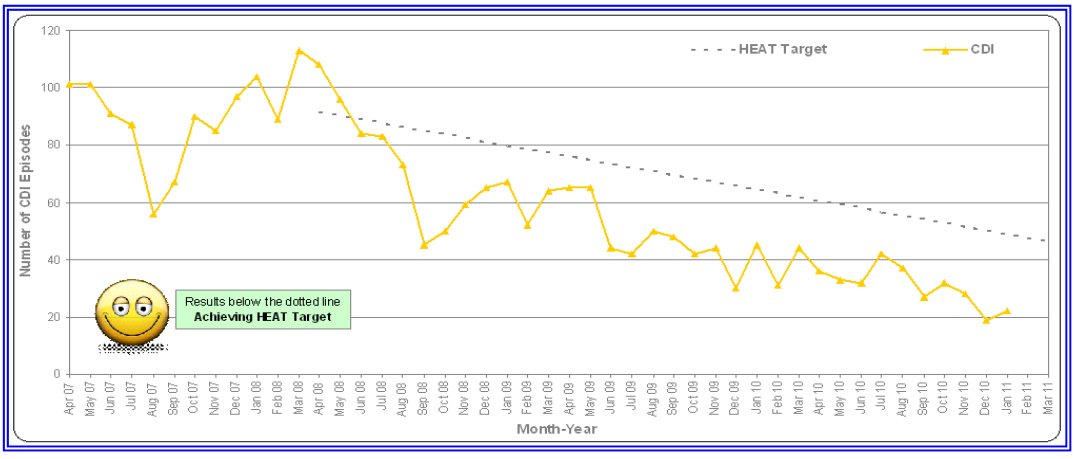
Clostridium difficile infection in the community

Tackling *Clostridium difficile* infection (CDI) is a priority for NHS Boards in Scotland. Over the past three years effort has focused on improving infection control and improved antimicrobial stewardship in secondary care. These measures have led to a significant reduction in CDI rates. The single most important measure appears to be the reduction in use of cephalosporins in secondary care.

CDI is not just a secondary care problem. As the total number of cases for Scotland falls the proportion attributable to primary care is increasing. Health Protection Scotland have clear data showing a significant number of cases originate from patients' homes or other community settings.

If a patient has been in hospital within the previous three months then this is defined as a secondary care infection.

As most primary care cases of CDI arise in the patient's own home, apart from simple hygiene measures, infection control plays a limited part in management. The key measure is to use less broad-spectrum antibiotics, particularly the '4C' antibiotics: cephalosporins; co-amoxiclav; ciprofloxacin (and other quinolones) and clindamycin. In addition it is important to have a high level of suspicion and send stool samples accordingly.



Key messages for general practitioners:

- **RECENT DISCHARGE FROM HOSPITAL:** Patients recently discharged from hospital (within the last three months) are most at risk of developing CDI but it can develop in individuals who have not been in hospital
- **20% OF CASES:** Up to 20% of cases of CDI present in the community setting in the patient's home or in care homes
- **OVER 50s:** The majority of cases occur in those aged 50 years and over but can occur in any age group
- **4Cs:** Antibiotic use is the greatest risk factor for CDI, particularly use of broad spectrum agents such as cephalosporins, co-amoxiclav, quinolones (including ciprofloxacin) and clindamycin
- **SAMPLE:** 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 or proton pump inhibitor use. GPs should make themselves aware of the local laboratory protocol for CDI testing.

A major change to the management of gout

Gout is the commonest form of inflammatory arthritis in the UK with a prevalence of 1.4%[1]. Prophylaxis, or urate lowering therapy (ULT) is indicated in patients suffering two or more attacks of gout in one year or who have developed tophi. Recent estimates suggest 63% of patients are being treated with ULT, the vast majority of these with allopurinol[1].

An ongoing Lothian audit of patients with gout in primary care showed 34% of patients were suffering recurrent attacks and 15% suffered tophaceous disease.

New guidelines have been issued by both the European League Against Rheumatism (EULAR)[2] and the British Society for Rheumatology (BSR)[3] for the management of gout. Both stress the importance of escalating ULT until serum urate falls below a target level in order to achieve disease control. The absolute level that is aimed for varies slightly between serum uric acid 0.36mmol/L (EULAR) and a more stringent 0.3mmol/L (BSR).

Recognising that aggressive initiation of ULT can provoke acute attacks, BSR guidance suggests that the dose of allopurinol be started at 100mg daily and escalated by 100mg every few weeks up to a maximum daily dose of 900mg until target serum urate is achieved. Lothian audit data suggests that only 21% of patients are achieving the BSR target of a serum urate <0.3mmol/L, with the likeliest explanation appearing to be that allopurinol was either not prescribed or prescribed at too low a dose (mean dose <300mg).

One important further development from previous prescribing advice is to recommend the co-prescription of colchicine following initiation of ULT for up to six months. Where colchicine cannot be tolerated, then provided there are no contra-indications, an NSAID can be substituted but this should be limited to six weeks.

When used appropriately, trials would suggest that allopurinol can achieve these levels of serum urate in the majority of patients but this frequently requires escalation beyond the typical dose of 300mg daily.[4] Genuine barriers to effective use are renal impairment (for which dose reduction is advised), intolerance (relatively rare) and hypersensitivity reaction (very rare).

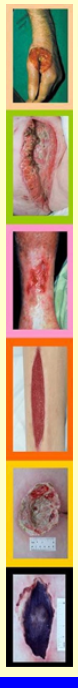
Key messages:

- **The dose of allopurinol can be titrated to a maximum of 900mg a day**
- **Successful control of gout requires titration of urate lowering therapy to achieve target serum urate**
- **Consider colchicine prophylaxis on initiation of ULT for up to six months. See www.ljf.scot.nhs.uk**
- **Febuxostat was recently approved by the Formulary Committee for second line where allopurinol is not effective or not tolerated.**

References

1. Annemans L *et al*. *Annals of the Rheumatic Diseases*, 2008;*67*;960-66.
2. Zhang W *et al*. *Annals of the Rheumatic Diseases*, 2006;*65*;1312-24.
3. Jordan KM *et al*. *Rheumatology*, 2007;*46*;1372-74.
4. Reinders MK *et al*. *Annals of the Rheumatic Diseases*, 2009;*68*;892-97.

Thanks to Dr Philip Riches, Consultant Rheumatologist, for contributing to this article.



LJF news: wound management

Welcome to the first article in a short series to promote good quality cost-effective prescribing within wound management.

Each article will highlight a different section of the formulary and will provide information on current prescribing patterns and the LJF choices.

It is expected that this series will highlight areas where changes in practice are required.

Tubular bandages

The first article will focus on a simple issue of non-formulary adherence with regard to **tubular bandages.**

Elasticated viscose bandage

First choice: Comfigrip®

Elasticated viscose stockinette

First choice: Comfifast®

The full LJF wound section 13.13 can be found at www.ljf.scot.nhs.uk/adult/adultLJF1313_Wound.pdf

Elasticated tubular bandages are particularly suitable for retaining dressings on difficult parts of the body or for soft tissue injury.

Elasticated tubular bandages are not suitable as the only method of applying pressure to an oedematous limb or to a varicose ulcer, because they exert inadequate pressure.

Safe and effective administration of eye drops and ointments

How many drops?

The BNF states that "one drop is all that is needed. Instillation of more than one drop may increase systemic side-effects." The lower fornix of the eye does not have the capacity to hold much more than one drop. Any excess will therefore either run down the patient's cheek or drain down the nasolacrymal duct. For most drops this will merely result in a nasty taste at the back of the throat but, as absorption through the nasolacrymal route avoids first pass metabolism, significant systemic side effects can occur. Nasolacrymal drainage can be avoided by pressing tightly at the inner corner of the eye for about 30 seconds after instilling a drop (punctal occlusion).

If using more than one type of drop

Allow five minutes between each drop so as not to wash one drop out with the next. If using preparations of different viscosity, put the thinner preparation in first. Put ointments in last.

Compliance aids

Elderly or arthritic patients often have problems squeezing eye drop bottles or even holding them in the correct position to get the drop in. A compliance aid is useful to hold the bottle in the correct position with no danger of the bottle tip touching the eye.

The Opticare® and Opticare-Arthro® devices make it slightly easier to squeeze the bottle. Both are prescribable by GPs. Some eye drops such as Xalatan®, Travatan® come in uniquely-shaped bottles which do not fit in the standard compliance aids. The manufacturers of these eye drops have their own compliance aids which they will supply to pharmacists free of charge on request.

Compliance aids remain on the bottle until it is finished. They should then be washed in warm soapy water before attaching to a new bottle.
N.B. Timoptol®, Trusopt® and Cosopt® bottles do not fit in any compliance aid.
The LJF eye chapter 11 was updated in September 2010. Look at the full chapter for the up-to-date advice. See www.ljf.scot.nhs.uk

Key messages:

- **Prescribe only ONE drop**
- **Ensure full storage and administration instructions are clearly marked on labels and that patients understand them**
- **Compliance aids may be useful to ensure patients can manage to administer their eye drops.**

Reference:

1. British National Formulary. BNF60. September 2010. www.bnf.org

Thanks to Angela James, Ophthalmic Pharmacist, Princess Alexandra Eye Pavilion, for contributing to this article.

LJF news: wound management

Item prescribed	No of Items (Dispensed)	COST
Tubifast®	740	£20486
Comfifast®	**540**	**£6246**
Tubigrip®	387	£2223
Comfifast® Multistretch	185	£4102
Tubifast® garment	137	£4906
Acti-Fast®	120	£1353
Comfigrip®	**57**	**£281**

This table provides information on the tubular bandages prescribed in Lothian for the quarter July to September 2010. It clearly demonstrated that the Lothian Formulary first choice is not the first choice amongst prescribers. Is there a reason for this? Both products have been evaluated and Comfifast® and Comfigrip® are equal to their competitors but are considerably cheaper in price.

Thanks to Dervilla Bray, Prescribing Adviser, East and Midlothian CHPs, for contributing to this article.

Anticipatory prescriptions for patients dying at home

This prescription may vary depending on clinical needs and safety concerns

Rx Prescribe sufficient supplies of anticipatory medicines to cover an out of hours period.

Rx Ensure a community medication administration chart is available.

Analgesic
morphine sulphate injection (10mg/mL ampoules)
Dose: 2mg subcutaneously, hourly as needed for pain or breathlessness
Supply 5 (five) 1mL ampoules

Anxiolytic sedative
midazolam injection (10mg/2mL ampoules)
Dose 2 - 5mg subcutaneously, hourly as needed for anxiety/ distress/ myoclonus
Supply 10 (ten) 2mL ampoules

Anti-secretory
hyoscine butylbromide injection (Buscopan®)
Dose: 20mg subcutaneously, hourly as needed for respiratory secretions. Maximum of 120mg in 24 hours.
Supply 10 ampoules

Antiemetic
levomepromazine injection (25mg/mL ampoules)
Dose: 2.5mg subcutaneously, 12 hourly as needed for nausea.
Supply 5 ampoules **or**
haloperidol injection (5mg/mL ampoules)
Dose: 0.5mg subcutaneously, 12 hourly as needed for nausea.
Supply 5 ampoules

It is difficult to get medicines quickly in the out of hours period unless they are already in a patient's house. Delays in symptom control can be profoundly distressing for patients, family and staff. Anticipatory prescribing ensures key medicines are available for symptoms which are likely when a patient is dying. The most common symptoms are pain, anxiety, respiratory tract secretions, nausea and vomiting.

A new guideline '*Anticipatory Prescription for patients dying at home*' was recently approved by the Lothian Formulary Committee and is supported by the '*Last Days of Life'* palliative care guideline; both are accessible on the palliative care guideline website www.palliativecareguidelines.scot.nhs.uk

Safety concerns

The decision to provide anticipatory medicines should always be based on a risk/benefit analysis. Where there are risks (such as drug diversion or misuse) it may be appropriate to prescribe small/reduced quantities of anticipatory medicines. A member of the multidisciplinary team may remove the medicines after the patient's death. Documentation is available to support this process.

Unused medicines

Patients and carers should be reminded frequently by the multidisciplinary team to return medicines which are no longer required, back to their community pharmacy for destruction. Patients and their carers are often not aware of the need to do this. Medicines are prescribed for an individual patient and must be returned to a pharmacy and destroyed when a patient dies.

Thanks to Dorothy McArthur, Principal Pharmacist, Palliative Care, St Columba's Hospice and Marie Curie Hospice, and Lynn Bennett, Senior Pharmacist, Palliative Care, Pharmacy Department, St John's Hospital, for contributing to this article.

Varicella Zoster Immunoglobulin (VZIG) supplies for primary care

VZIG is now available from the hospital pharmacies at the RIE, WGH and SJH. It was previously stocked by the Blood Transfusion Service. GPs considering prescribing this should contact a virologist for advice on whether treatment is appropriate, and then contact the hospital pharmacy that is most convenient for the patient. The pharmacist will then fax a pre-printed VZIG order form to the GP. This is then completed and faxed back to pharmacy and given to the patient to take to their chosen hospital to collect the VZIG. The patient re-attends their GP surgery to have the VZIG administered.

Full details available from these hospital dispensaries:
RIE ☎ 0131 242 2911 WGH ☎ 0131 537 1210 SJH ☎ 01506 522037

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Pentland House
47 Robb's Loan
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