LOTHIAN PRESCRIBING BULLETIN

Supporting prescribing excellence - informing colleagues in primary and secondary care

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In this issue ...

ASCOT-BPLA and the Lothian Hypertension Guidelines

The Lothian Hypertension Group recently indicated that the publication of the ASCOT-BPLA study[1] does not alter the Lothian Hypertension Guidelines[2] in respect of the approach to patients newly diagnosed with hypertension.

There remains an issue, however, about individuals who might already be on treatment. It is now generally accepted that the combination of a beta blocker with a thiazide diuretic will increase the likelihood of the development of diabetes in later life. Although the risk is small, some consideration should be given to those patients who may already be on either a beta blocker alone or dual therapy with a beta blocker and a thiazide. It is thought that this will apply to a large number of patients whose blood pressure may currently be well controlled.

The logistics of widespread change with the possibility of resulting inadequate control, confusion and even the risk that some patients may stop taking anti-hypertensive therapy, leads to the recommendation that there be no automatic changes of therapy for those patients with controlled hypertension.

Key message:

The Lothian Hypertension Guidelines remain unaltered.

Thanks to Dr Paul Padfield, Consultant Physician / Reader in Medicine, LUHD and the Lothian Hypertension Group for contributing to this article.

There are certain groups of individuals, however, who might be considered for a change in therapy:

- patients with uncontrolled blood pressure whose treatment includes a beta blocker thiazide combination
- patients at greater risk of developing diabetes in later life, i.e. those with one or more of the following factors:
  - significant obesity
  - family history
  - Asian origin
  - those already shown to have impaired glucose tolerance

It is emphasised that lowering blood pressure is the most important aspect in the reduction of cardiovascular risk and that is the advice that we should continue to give to our patients.

Lothian Hypertension Guidelines 2005 Summary

Drug Choice

Step 1 bendroflumethiazide 2.5mg (lisinopril if < 50 years)

Step 2 bendroflumethiazide and lisinopril

Step 3 add nifedipine LA

Step 4 add atenolol

Step 5 doxazosin *or* spironolactone *or* moxonidine *or* referral for specialist advice

References

1. Prevention of cardiovascular events with an antihypertensive regimen of amlodipine adding perindopril as required versus atenolol adding bendroflumethiazide as required, in the Anglo-Scandinavian Cardiac Outcomes Trial-Blood Pressure Lowering Arm (ASCOT-BPLA): a multicentre randomised controlled trial. Dahlöf B, Sever PS, Poulter NR *et al. Lancet* 2005;*366*:895-906.
2. Lothian Hypertension Guidelines 2005. http://www.ljf.scot.nhs.uk/lpb/LPB15_Hypertension.pdf

Contact the editorial team at ljf@lhb.scot.nhs.uk

There may be hazards ahead: fentanyl patch formulations

There have been several near misses and incidents in primary and secondary care regarding the use of fentanyl patches. The following information aims to clarify a potentially confusing and dangerous situation for patients, prescribers and pharmacists.

Fentanyl is a second line opioid for stable moderate to severe opioid responsive pain. The patch formulation is indicated when the oral or subcutaneous routes are inappropriate or unacceptable, the patient is unable to tolerate morphine due to side effects (e.g. constipation, drowsiness, confusion) or compliance is poor but supervised patch application is possible.

- Two formulations of fentanyl transdermal patches are now available:
  - *Matrix patch* where fentanyl is evenly distributed throughout a drug-in-adhesive matrix.
  - *Reservoir patch* with fentanyl contained within a reservoir in the patch.
- The two transdermal fentanyl patch formulations are reported to be bioequivalent but there are potential problems if patients are supplied with the different formulations. This can be in part due to the variations in adhesion of the patches to different patients.
- **Matrix patches may be cut in half** for patients requiring a smaller fentanyl dose. Cutting patches is an **off-licence use** which has been successful in clinical practice, but has not been subject to formal study and is **not endorsed by the manufacturer**.
- **Reservoir patches should not be cut** - cutting the patch destroys the controlled release mechanism and allows fentanyl to leak from the patch, with the potential for rapid and excessive drug absorption.

Key messages:

- **Two formulations of transdermal fentanyl patch exist: matrix and reservoir.**
- **Specify the formulation of fentanyl transdermal patches (matrix or reservoir) on the prescription to ensure that patients are maintained on the same formulation of patch.**
- **Do not cut reservoir fentanyl transdermal patches.**
- **Refer to the Lothian Palliative Care Guidelines for more information on the initiation and use of fentanyl patches**
  www.scan.scot.nhs.uk/scanDR/NVC/1600/Display/Palliative_Care_booklet.pdf

Update on availability of thioridazine

Further to the article published in LPB Issue No. 14 (April/May 2005), thioridazine (Melleril®) has now been withdrawn from the UK.

Generic versions are not available in the UK but thioridazine can be imported via IDIS World Medicines Ltd on an unlicensed basis. Supplies of 25mg, 50mg and 100mg tablets are available.

The Lothian Formulary Committee, in accordance with the Policy for the use of unlicensed (and off-label) Medicines in NHS Lothian[1], has classified thioridazine as an **AMBER** category medicine. It is suitable for shared care prescribing between specialists and GPs. A revised shared care protocol has been approved by the General Practice Prescribing Committee.

Thioridazine is indicated for second line treatment of schizophrenia only, and should be reserved for continuation therapy in those patients who have been unable to withdraw from thioridazine on previous attempts. It may also be considered as a treatment option in patients where it has been found to be a successful treatment in the past, and when no other LJF antipsychotic is effective or tolerated. However, prescribing of thioridazine for new patients will be by specialists only.

Key messages:

- **Thioridazine will be available to prescribe, on an unlicensed basis, for those patients who have been unable to withdraw from thioridazine treatment.**
- **A revised shared care protocol is now available for this indication - www.ljf.scot.nhs.uk**

Reference

1. Lothian Area Drug and Therapeutics Committee. Policy for the use of unlicensed (and off-label use) Medicines in NHS Lothian. December 2004. www.ljf.scot.nhs.uk

Paediatric Asthma and Croup - an update

Asthma

Emergency management of asthma in the community requires adequate dosing of bronchodilator and early use of oral corticosteroids. In children with asthma, recommended corticosteroid doses are often higher than practitioners might expect.

In those children who do not require admission to hospital, Lothian specialists recommend the following prescribing guidance for the management of an **acute asthma exacerbation:**

- **Oral prednisolone:** 3-day course: <12 months 2mg/kg once per day; 1-2 years 20mg once per day; 3-4 years 30mg once per day; ≥5 years 40mg once per day.
- **Multidose salbutamol:** 10 actuations of 100 micrograms metered dose inhaler (MDI) salbutamol (1000 micrograms) via a spacer (+/- mask) may be provided (10 breaths for each actuation). Parents are advised this *emergency dose* may be used in the event of an acute exacerbation. Medical attention should be sought if the dose fails to provide relief, needs to be repeated within 4 hours or more than two such doses are needed within a 24-hour period. **Regular use of multidose salbutamol at home is unsafe.**
- **Increased bronchodilator:** salbutamol may be given as 2-4 puffs four times per day at the onset of the exacerbation and for its duration.
- Clinical review of these patients is recommended.

Croup

Croup (viral laryngotracheobronchitis) is a common condition in children from 6 months to 6 years of age. A barking cough usually occurs in association with a viral upper respiratory tract infection. An effective treatment is to provide a single dose of oral prednisolone. Recent evidence demonstrates the benefit of a single dose of steroids even in children with mild croup (in terms of resolution of symptoms and family quality of life)[1].

Lothian specialists recommend that children in the community with croup should receive **a single dose** of oral prednisolone, prescribed according to age: <12 months 2mg/kg; 1-2 years 20mg; 3-4 years 30mg; ≥5 years 40mg.

Children who have, or develop, severe respiratory distress or biphasic stridor require urgent review at hospital. Children in whom there is no improvement within 6 to 8 hours of a single dose of oral steroids should also be reviewed, and may require a second dose of oral prednisolone.

Reference

1. Bjornson C L *et al*. *N Engl J Med*. 2004;*351*:1306-13.

Thanks to Dr Steve Cunningham, Consultant Respiratory Paediatrician and Part Time Senior Lecturer and Kirsten Thomson, Clinical Pharmacist, Royal Hospital for Sick Children for contributing to this article.

Reintroduction of the Volumatic® spacer device

Following concerns raised by the Committee on Safety of Medicines regarding possible changes in drug delivery to the lung when switching from the Volumatic® spacer device to the AeroChamber® Plus, its manufacturer (Allen & Hanburys) is reintroducing the Volumatic® device and expects to supply new stock in the UK from mid-February 2006.

Advice for prescribers:

- Patients with Allen & Hanburys inhalers who require a spacer device for the first time should be prescribed a Volumatic®.
- Patients who have already been switched to the AeroChamber® Plus have no urgent need to switch back to the Volumatic® (unless they are experiencing difficulties).
- Priority for switching back to the Volumatic® should be given to children and those taking high dose corticosteroids and long-acting beta$_2$ agonists.
- Patients should be monitored for changes in symptoms following change of spacer device.

Reference

Reintroduction of the Volumatic Spacer Device - Important New Information. Urgent Message. Scottish Executive. 5 January 2006.

Discontinuation of Bricanyl® (terbutaline) MDI

Bricanyl® (terbutaline) metered dose inhaler (MDI) is no longer available[1]. There is currently no generic terbutaline MDI. For those patients requiring a bronchodilator MDI, consider switching to salbutamol MDI CFC-free.

Reference

1. Letter. AstraZeneca. 23 December 2005.

Treatment of prolonged seizures and status epilepticus

Clusters of epileptic seizures or prolonged seizures may lead to irreversible brain damage or status epilepticus which is life threatening. Urgent medical treatment of these patients in the community may reduce injury, prevent progression to status and avoid unnecessary hospital admissions.

Rectal administration of medicines may be difficult and/or unacceptable for many patients and their carers, particularly the young or those with learning disabilities. In this case midazolam for administration via the buccal route may be prescribed.

Midazolam buccal

The preparation of choice is midazolam maleate **10mg/mL** (Epistatus®) liquid for buccal use, an unlicensed preparation, manufactured as a 'special'.

- Treatment will be initiated by a Paediatrician, a Paediatric Neurologist, a Neurologist or a Learning Disabilities Specialist.
- Prior to prescribing, patients and their carers are shown how to administer buccal midazolam in conjunction with training in epilepsy awareness.
- A treatment plan will be provided by the specialist for each patient.
- GPs should only prescribe buccal midazolam on a GP10 on the recommendation of a specialist in line with the treatment plan.
- Midazolam liquid 10mg/mL (Epistatus®) is available from Special Products Ltd (01932 820666) on a named-patient basis.
- Epilepsy specialist nurses are available for adults - 0131 537 2089, learning disabilities - 0131 537 4203, paediatrics - 0131 536 0767.

For the treatment of prolonged seizures and status epilepticus in the community, the LJF recommends:

ADULTS	
First choice:	**diazepam** rectal solution
Second choice:	**midazolam*** buccal
CHILDREN	
First choices:	**diazepam** rectal solution *or* **midazolam*** buccal

** Midazolam buccal is reserved for patients with a pre-planned individual protocol*

Thanks to Fiona MacKinnon, Epilepsy Specialist Nurse and Alison Thomson, Clinical Pharmacist, Western General Hospital, and Celia Brand, Epilepsy Specialist Nurse, Royal Hospital for Sick Children for contributing to this article.

LUHD Antibiotic Prescribing Guideline in Adults

LUHD Drug and Therapeutics Committee is reissuing the Antibiotic Prescribing Guideline in Adults (issue date January 2006). The new guideline has been printed on green paper and should replace the previous version (yellow paper), circulated in April 2005.
When you receive this new copy, please ensure that the correct version is available for use in your clinical area.

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