LOTHIAN PRESCRIBING BULLETIN

Supporting prescribing excellence - informing colleagues in primary and secondary care

NHS Lothian

In this issue …

Issue No. 98 **July 2019**

Ghost tablets

The administration of certain **extended release** preparations can result in the empty shell (ghost tablet or capsule) or remnants of the **extended release** preparation being eliminated in the stool. This can cause anxiety and distress amongst patients and lead them to believe that the medicine may not be working. Patients should be advised, preferably when first supplied with the medicine, that this is normal and they should be reassured that the active substance has been released and absorbed.

This can occur with some brands of the following **extended release** preparations: **venlafaxine**, **diltiazem**, **nifedipine**, **doxazosin**, **isosorbide mononitrate**, **oxycodone, methylphenidate**, **paliperidone**, **sodium valproate and metformin**. This list is not exhaustive and there are likely to be other medicines which are released in a similar manner.

A similar but unrelated issue arises in situations where rapid gastrointestinal transit may occur e.g. in patients who have undergone bowel surgery in the ileocecal region. In such situations, there may be a risk of incomplete release of medication and unabsorbed medication residue being passed into the stool. If this is reported in such patients, the patient's response to therapy should be reviewed.

Remember
The Summary of Product Characteristics (SPC) is a key resource for obtaining medicine-related information and can be accessed at https://www.medicines.org.uk/emc. Sections 4.2 (Posology and method of administration) and 4.4 (Special warnings and precautions for use) are the most useful sections of an SPC to check whether a ghost tablet or capsule may be passed into the stool and what, if any, action to take.

Thanks to Fiona Cleat, Medicines Information, for contributing this article

The halo effect in prescribing

The LPB editorial team recently saw an article that posed some interesting questions about decision making and Drugs and Therapeutics Committees (DTCs). The article was by Dr Jared Austin and Dr Stephanie Halvorson, Reducing the Expert Halo Effect on Pharmacy and Therapeutics Committees JAMA Feb 5 2019, 321; 5: 453- 454.

It focuses on a scenario that happens regularly at DTCs and Formulary Committees. A specialist clinician advocates for a medicine to be used based on pharmacology, sometimes limited evidence and surrogate end points. The committee using their expert skills in interpreting evidence need to avoid the 'expert halo' effect in their decision making: for example, not being swayed by the enthusiasm of the expert clinician when assessing the data.

We recommend everyone reads it, not just those involved in prescribing committees. JAMA articles are often difficult to access; you will be able to access it through the Knowledge Network. In a previous Issue 60 of the LPB we provided information on how to access this.

Would I Li^+ to you?
- the need to know about lithium monitoring

Lithium is a mood stabiliser which plays an essential role in the long term management of bipolar disorder and depression. It has a narrow therapeutic index, therefore, careful therapeutic drug monitoring is needed to maximise clinical effectiveness and to minimise adverse drug events and toxicity.[1]

Recently, a letter from the Chief Medical Officer 'National Guidance for Monitoring Lithium' defined a minimum standard for health monitoring for all patients taking lithium in Scotland.[2] It advised that patients should have lithium levels monitored every three months, and the following at baseline and every six months:

- urea and electrolytes (sodium, potassium, urea, creatinine and eGFR - if eGFR falls rapidly to <45ml/min review lithium treatment and refer to renal medicine)
- serum calcium
- thyroid function
- BMI

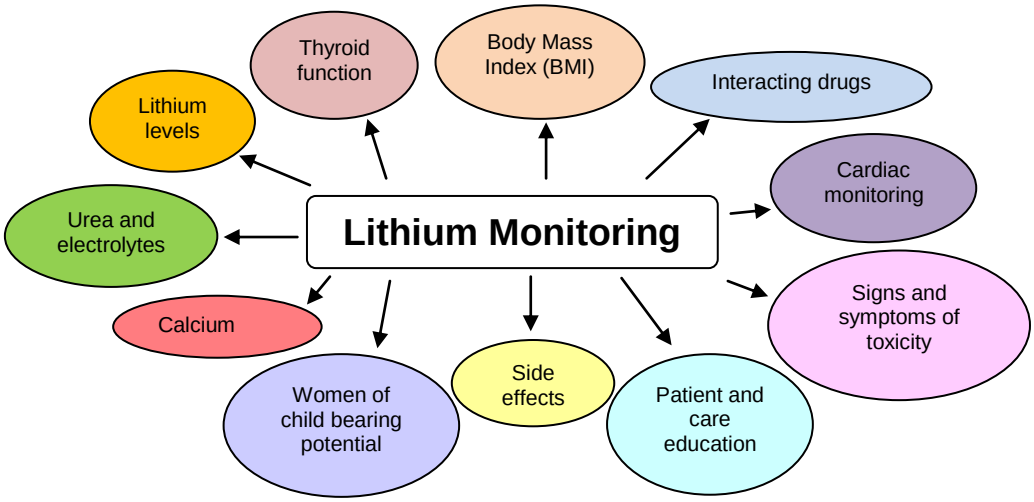
In addition, NICE guidance[1] recommends that blood pressure, pulse, metabolic and liver function are checked at least annually as part of a physical health check of people with bipolar disorder.

The updated Scottish Government guidance[2] additionally highlighted the requirement for baseline ECG monitoring to be completed in patients at risk of, or with established, cardiovascular disease prior to the initiation of lithium treatment. It also reinforced the warning relating to the use of lithium in women of childbearing potential due to its teratogenic nature. It advised the risk and benefits of lithium treatment should be discussed fully with all relevant patients. This should be completed prior to the initiation of lithium therapy with patient consent recorded appropriately and should be revisited at least annually.

Current guidance on the management of patients on lithium is available via the NHS Lothian intranet. It should be highlighted that the current NHS Lothian guideline is under review and will be available in late June/early July.

References:

1. Bipolar disorder: assessment and management. National Institute for Health and Care Excellence. 2014. Last updated April 2018. http://www.nice.org.uk/guidance/cg185/ *[Accessed 05/06/19]*
2. National guidance for monitoring lithium. SGHD/CMO(2019)4. Scottish Government Health and Social Care Directorates. Scottish Government. 27 March 2019. https://www.sehd.scot.nhs.uk/cmo/CMO(2019)04.pdf *[Accessed 05/06/19]*



Thanks to Kerry McGuire, Pre-registration Pharmacist, St John's Hospital, for contributing this article.

Teratogenic medicines and contraception

Some medicines are known or suspected to be teratogenic (risk of birth defects and developmental issues) when taken during pregnancy. The product information for these medicines advise that pregnancy should be avoided during treatment (and sometimes after treatment ends), with advice on using contraception and sometimes formal pregnancy prevention programmes. Most recently we have seen information on sodium valproate, but there are a number of other commonly prescribed medicines with teratogenic potential.

Women should be advised of the risks of taking the medicine and the need to use the most effective contraceptive method.

So which contraceptive?

All contraceptive methods have designated efficacies, based on their failure rates. Efficacy information is now included in the LJF section for contraceptives. The number of unintended pregnancies per 100 women per year is noted for each type of contraception. Highly effective methods have typical-use failure rates of less than 1% and include male or female sterilisation and long-acting reversible contraceptive methods (intrauterine devices and implants). Methods used at time of sexual intercourse or based on fertility awareness are not classed as effective for use with medicines with teratogenic potential.

Pregnancy testing prior to starting treatment

A woman may be unaware that they are pregnant at the start of treatment with a teratogenic medicine. One way to avoid accidental exposure is for a pregnancy test to be performed before prescribing the medicine.

A recent article in the Drug Safety Update for March 2019 includes a very useful table of pregnancy prevention information for use during treatment with medicines of teratogenic potential.

Inherited Metabolic Disorders (IMD) – What you need to know?

From the 1st of April 2019 there will be a Scotland wide National Service for IMD. The screening program tests for six Inherited Metabolic Disorders around day 5 after birth:

- Glutaric Aciduria Type 1 (GA1)
- Homocystinuria (HCU)
- Isovaleric Acidaemia (IVA)
- Phenylketonuria (PKU)
- Medium Chain Acyl coA Dehydrogenase Deficiency (MCADD)
- Maple Syrup Urine Disease (MSUD).

The most common diagnosis is Phenylketonuria (PKU) with an incidence of 1:7,000 which means 6-8 children with PKU are born in Scotland each year.

Few GPs will have experience of children or adults with IMD. Many of the specialist products designed for IMD have similar names but are prefixed with the initials of the condition. For example products suitable for PKU include PKU Anamix Infant, PKU Start, while those suitable for GA1 include GA1 Anamix Infant, GA gel. **These products are not interchangeable** and are carefully chosen to suit the disorder the individual has and their age.

Care should be taken to ensure the correct product is provided for the family. Should the wrong product be prescribed the individual may receive large quantities of harmful amino acids. A message has been added to Scriptswitch to highlight these products to minimise the risk.

Low protein prescribable foods are also required in addition to the specialist products designed for IMD. Low protein foods are a vital part of treatment, ensuring the highly artificial diet provides sufficient energy to prevent catabolism and poor metabolic control. Low protein foods are only available on prescription and dispensed via pharmacy or home delivery. They should not be confused with gluten free products, which are unsuitable. Low protein foods are not provided by the gluten free foods service.

Any queries regarding the prescription of specialist products designed for IMD or low protein foods can be directed to Carolyn Dunlop or Janet Purves, Dieticians at the Royal Hospital for Sick Children.

Palliative Care Guidelines Update

The Scottish Palliative Care Guidelines have now been updated and are available online. The revised content was published in March 2019.

There will be a delay before the A5 guideline booklet is re-printed. Selected guidelines are available as a mobile app for iPhone and Android and the content of the apps is in the process of being updated in accordance with the website. Visit the Mobile App page for more information and how to access the App.

There is one new guideline on the management of end stage liver disease; a refresh of guidance on the use of the CME T34 Syringe Pumps and a number of new medicine information sheets: morphine; dexamethasone; levetiracetam; hydromorphone; buprenorphine; clonazepam. (In this article each drug name is hyperlinked to the information sheet.)

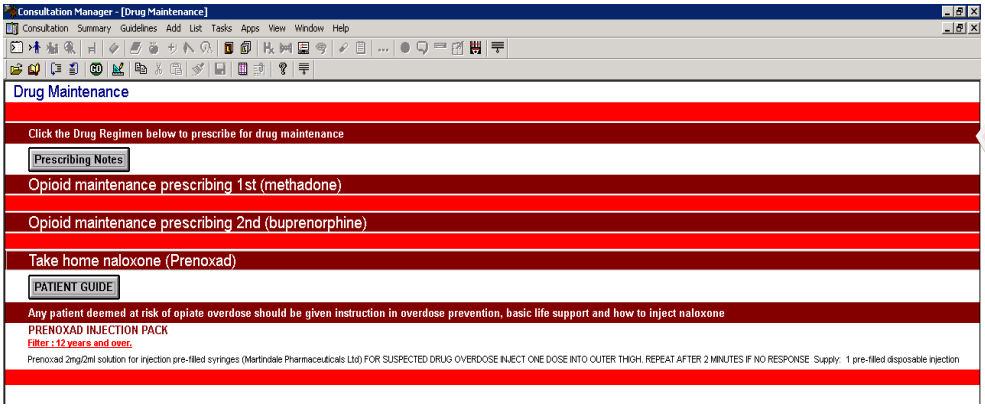
A number of symptom management guidelines have also been reviewed where new evidence or changes in practice indicated this was necessary. A full list of updates is available in the News and Updates section of the Scottish Palliative Care Guidelines website.

Take Home Message for naloxone: Prenoxad®

Naloxone is an opiate antagonist used to reverse the effects of opiate overdose and is available in several forms. Most Take Home Naloxone (THN) kits are provided by drug treatment services without a prescription, as naloxone is covered by an exemption to the regulations governing supply of prescription only medicines. All THN kits supplied by drug treatment services in Lothian will be the Prenoxad® brand as this is the only kit currently designed for lay-person administration – the kit contains the necessary needles, instructions and advice for use during an emergency. THN can also be supplied via community prescription or ordered as stock via GP10A forms.

Recent ground-breaking work by the Primary Care Facilitation Team has resulted in an increase in the number of THN kits being prescribed by GPs. **We would like to remind prescribers and community pharmacists of the importance of prescribing and dispensing only the Prenoxad® branded kit for patients at risk of overdose**.

Thanks to the following for contributing this article: Chris Miller, Lead Pharmacist and Dr Judith Craven, PCFT. Further information can be provided by Chris or Judith and information on training and supply can be obtained via Andrew O'Donnell, Trainer in Substance Misuse.



The easiest and safe way to prescribe take home naloxone (Prenoxad®) is to use eLJF-CLINICAL where the correct product with correct dosing instruction is prescribable. There is also a link to the patient guide.

Correspondence:
Medicines Management Team (MMT)
0131 537 8461
prescribing@nhslothian.scot.nhs.uk