Medication Safety Today

Issue 46 **The Northern Ireland Medicines Governance Team Newsletter** **February 2014**

Change to Hyperkalaemia Kits

The contents of hyperkalaemia kits are changing. There is a long term shortage of glucose 50% Minijets® ; two glucose 50% vials will now be included in the kit.

Chemoprotect® spikes have also been added to the kit to assist withdrawal of glucose 50% from the vial. The instruction sheet in the kit (shown below) '*How to make up 10 units of Actrapid® (soluble) insulin in 50ml glucose 50% vial using the hyperkalaemia kit'* has been changed accordingly.

The appearance of the hyperkalaemia kit will change as shown below:

to

Also the number of calcium gluconate ampoules in the hyperkalaemia kits will reduce from ten to five.

During this changeover, both old and new format kits will be in circulation.

Calculations

1. A 4kg baby requires a dose of medicine X. The dose is 25micrograms/kg and is available as 5mg in 5ml ampoules. How many mls are required to make up this dose?
2. A 9kg child requires a dose of medicine Y. The dose is 15mg/kg and it is available as 10mg/ml ampoules. How many mls are required to make up this dose?
3. You are administering amoxicillin to a neonate. The dose prescribed is 90mg and you have amoxicillin 125mg/5mls oral solution available. What volume do you need in order to give a 90mg dose?
4. You are prescribing aminophylline infusion for the treatment of acute asthma at a dose of 5mg/kg. What is the total dose required for an adult weighting 76kg?
5. You are administering intravenous furosemide 40mg. If furosemide is available as a 10mg/ml (2ml ampoule), how many ampoules do you need to make up a 40mg dose?

(Answers overleaf)

Change in codeine advice

In June 2013 the Medicines and Healthcare products Regulatory Agency (MHRA) issued new guidance on the use of codeine in children. The use of codeine is restricted to children older than 12 years to treat acute (short lived) moderate pain where the pain cannot be relieved by other painkillers such as ibuprofen or paracetamol and cannot be used at all in patients under 18 years after a tonsillectomy or adenoidectomy for obstructive sleep apnoea.

- ☑ Do you know the new indications for codeine?
- ☑ Do you know the dose ranges of alternative analgesics in children under 12 years?

The full MHRA guidance can be found at: http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON287006

Injectable magnesium sulphate

Medication incidents have occurred in Northern Ireland (NI) hospitals with injectable magnesium sulphate, resulting in varying degrees of patient harm.

Intravenous (IV) magnesium sulphate is widely used to treat a number of conditions however it has the potential to cause serious harm or death when used incorrectly.

A Failure Modes and Effects Analysis (FMEA) into the use of IV magnesium sulphate has highlighted the main risks involved, with the following recommendations disseminated to all Trusts in NI.

- Clinical guidelines should be available in all wards/clinical areas to support the safe prescribing of IV magnesium sulphate in all relevant settings. The guidelines should express the dose required in both grams and mmols, and the required rate of infusion.
- Magnesium sulphate injection and pre-prepared infusion strengths should be expressed in grams and mmols in all electronic prescribing and dispensing systems to reduce confusion in magnesium dosing.
- Bolus doses of IV magnesium sulphate must never be administered from an infusion preparation where both a bolus and infusion are to be given.
- Pre-prepared IV magnesium sulphate infusions should be used when these become available.

Find out what is happening in your Trust in relation to the implementation of recommendations from the 'Safety and Quality Learning Letter: 'Safe use of intravenous (IV) magnesium sulphate' (LL/SAI/2013/023 (AS), Health and Social Care Board / Public Health Agency, 9th September 2013.

If you have any comments on this newsletter, please contact Sharon O'Donnell, Medicines Governance pharmacist on Ext: 38129 at the Royal Hospital or by e-mail at Sharon.ODonnell@belfasttrust.hscni.net Further copies of this newsletter can be viewed at www.medicinesgovernanceteam.hscni.net or on your Trust intranet.

ANSWERS TO CALCULATIONS

1. 0.1ml 2. 13.5ml 3. 3.6ml 4. 380mg 5. 2 ampoules

Buprenorphine patches

BuTrans® is a transdermal patch containing buprenorphine, indicated for non-malignant pain of moderate intensity when an opioid is necessary for obtaining adequate analgesia. BuTrans® is replaced every 7 days. Transtec® is a transdermal patch containing buprenorphine, indicated for moderate to severe cancer pain and severe pain which does not respond to non-opioid analgesics. Transtec® is replaced after 96 hours at the latest, usually changed twice a week at regular intervals e.g. changed Monday morning and Thursday evening.

Neither BuTrans® or Transtec® is indicated for the treatment of acute pain.

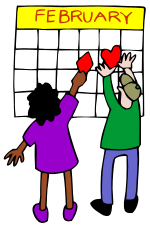
Medication incidents have occurred where Transtec® has been applied once a week instead of BuTrans® with ineffective analgesia towards the end of the week by which time the Transtec® patch would have been depleted.

Safety tips

To avoid confusion between buprenorphine patches:

- ☑ Always prescribe by brand name
- ☑ Check that the frequency of changing the patch matches the expected frequency for that preparation.

Check the date



Medication incidents have been reported where a medicine has been prescribed that had been discontinued before the patient's admission to hospital. This can occur when the ECS/ECR medication list is simply transcribed onto the kardex without checking the date of last issue of a medicine. The GP system available through ECS/ECR will contain all the medicines prescribed for a patient and this can include medicines that have been stopped or changed.

Safety tip

- ☑ Checking the date of last issue can indicate if a medicine has been discontinued or if the patient has stopped using a medicine; if this date is not within the last month for a regular medicine or the last three months for a 'when required' medicine, check with the patient/ carer if they are still using this medicine or if it has been changed.