

Medication Safety Today



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Hyperkalaemia in adults

Serious overdoses of insulin have occurred in the past in the treatment of hyperkalaemia. To avoid recurrence, a hyperkalaemia kit (shown below) and regional guidance¹ were introduced in Northern Ireland a number of years ago.

Remember: to treat hyperkalaemia in adults the dose of soluble insulin is **10units** and this dose must be **second checked** with the senior nurse on duty.

It is also important that unsheathed needles are not returned to Pharmacy in hyperkalaemia kits as has occurred with a number of kits recently. Ensure all sharps have been properly disposed of before returning used hyperkalaemia kits to Pharmacy.



1. Guideline for the treatment of hyperkalaemia in adults http://www.gain-ni.org/images/Uploads/Guidelines/hyperkalaemia_guidelines.pdf

Vaccine update

Two new vaccine brands, Infanrix[®] IPV Hib and Boostrix[®]-IPV, are being introduced into the national routine immunisation schedule in 2014, alongside Infanrix[®] IPV and Repevax[®].

The poster shown to the right has been issued by the HSC Public Health Agency to highlight who the vaccines are for and aims to avoid confusion between the brands. If you dispense or administer vaccines, familiarise yourself with these changes.



'O' is for.....

Medication incidents continue to be reported involving confusion between Oramorph[®] (morphine sulfate) and OxyNorm[®] (oxycodone). While both medicines are strong opioids they have different potency with OxyNorm[®] being twice as potent as Oramorph[®], OxyNorm[®] 5mg is equivalent to Oramorph[®] 10mg. Therefore where the two medicines are confused, this means either ineffective analgesia or risk of opioid overdose for the patient.

Safety tips:

- ☑ Be aware of sound-a-like medication names. There are a number of these among opioid medicines: morphine/diamorphine, Oramorph[®]/OxyNorm[®], tramadol/tapentadol, morphine/hydromorphone. Each of these medicines has a different potency.
- ☑ Confirm that the dose and preparation are appropriate based on the previous analgesic use by the patient. Use opioid dose conversion charts to assist.
- ☑ Ensure second checking procedures are followed for dispensing and administration of strong opioids.
- ☑ Risk assess the storage of opioids in the controlled drug (CD) cupboard. Because these medicines are stored in close proximity, there is increased likelihood of mis-selection errors and they may need to be stored separately within the CD cupboard.

If you have any comments on this newsletter, please contact Jillian Redpath, Medicines Governance pharmacist on Ext: 3737 at Craigavon Area Hospital or by e-mail at jillian.redpath@southerntrust.hscni.net Further copies of this newsletter and past editions can be viewed at www.medicinesgovernanceteam.hscni.net or on your Trust intranet.

Right insulin, right time



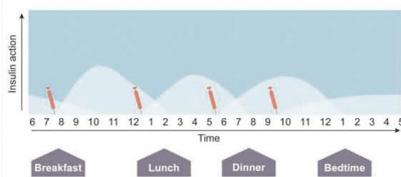
Some medicines can be taken at any time of the day whereas other medicines need to be taken at specific times of day that relate to the action of the medicine. Insulins are one such group of medicines. There are now many different insulin products available, with four main insulin types depending on the onset and duration of action:

- Rapid acting insulin e.g. NovoRapid[®], Apidra[®], Humalog[®].
- Short acting insulin e.g. Actrapid[®], Humulin S[®].
- Intermediate acting insulin e.g. Insulatard[®], Insuman Basal[®], Humulin I[®].
- Long acting insulin e.g. Lantus[®], Levemir[®].

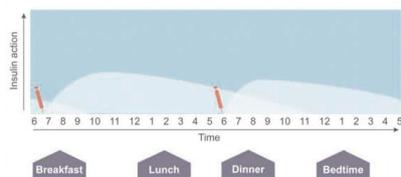
In addition, pre-mixed (biphasic) insulins are a mixture of either rapid acting or short acting insulin in combination with intermediate acting insulin e.g. NovoMix 30[®], Humalog Mix 25[®], Humalog Mix 50[®], Humulin M3[®], Insuman Comb 15[®], Insuman Comb 25[®], Insuman Comb 50[®].

Medication incidents continue to be reported where either the wrong insulin has been prescribed or the right insulin prescribed but at the wrong time of day. **A simple check should always be done to confirm that the insulin product makes sense for the time of day that it is being given.** If they don't correspond then either the insulin product or the time of day may be wrong. Usual insulin regimes are described below along with a diagram of usual timing, onset and duration of action.

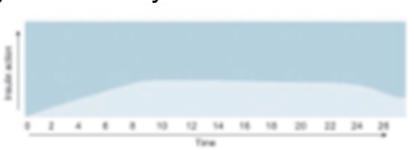
Basal bolus: Rapid or short acting insulin at meal times and once daily long acting insulin, usually at bedtime.



Twice daily pre-mixed (biphasic) insulin: At breakfast time and with evening meal.



Long acting insulin alone: usually once a day or occasionally twice a day.



Further information is available in BNF section 6.1.1 or trust guidelines.

Inside out

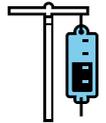


Potassium permanganate is indicated for cleansing and deodorising suppurating eczematous reactions and wounds. It is available as a tablet from which a solution is prepared. Medication incidents have occurred when this tablet has been administered orally rather than used to prepare a topical solution.

Safety tips:

- ✓ Document the route of administration clearly on the Kardex for potassium permanganate prescriptions.
- ✓ At ward level, ensure potassium permanganate solution tablets are stored with other external medicines and not in the medicines trolley.
- ✓ Do not leave potassium permanganate tablets at the bedside with the patient.

IV Paracetamol



Fatal incidents have been reported in the past when intravenous (IV) paracetamol has not been prescribed at the correct dose.

Remember, a dose reduction is required in all patients weighing **less than 50kg**. See BNF for guidance.

Other safety tips:

- ✓ Do not co-prescribe any paracetamol containing product by any other route if prescribing IV paracetamol. Other paracetamol containing products should be discontinued on the prescription chart when IV paracetamol is started.
- ✓ Check when the last dose was given before administering a dose of IV paracetamol. This check should include a review of the anaesthetic record and emergency department flimsy.
- ✓ When administering IV paracetamol, be aware that the strength of paracetamol infusion is 10mg/ml.
- ✓ Review continued need for IV paracetamol and consider oral route as soon as appropriate.