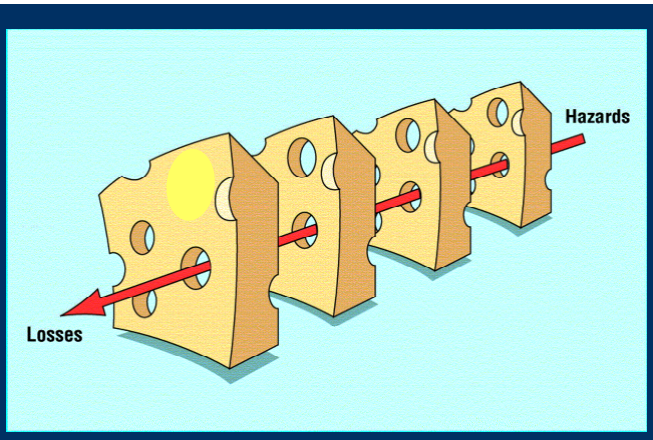
Medication Safety Today



Issue 17 **The Northern Ireland Medicines Governance Team Newsletter** **November 2006**

Transfer of Information

Medication incidents have occurred when incorrect or inaccurate medical information has been transferred between hospitals.

In August 2006, the Clinical Resource Efficiency Support Team (CREST) issued a 'Protocol for the Inter Hospital Transfer of Patients and their Records.' It is acknowledged that significant risks to patients exist if medical information is not communicated in a timely and accurate manner when a patient is transferred between hospitals.

To improve this process, CREST recommend that the following must be transferred with the patient:

- Patient's medical notes and summary clinical note.
- Patient's medicine kardex.

A transcription of the kardex onto a summary note MUST NOT BE MADE. Evidence suggests that transcription is a significant source of error.

The full protocol can be accessed at:
www.crestni.org.uk/publications/protocol.pdf

Calculating ketamine

Ketamine is a short acting anaesthetic with analgesic properties at low doses. It is used particularly for neuropathic pain, ischaemic limb pain and refractory cancer pain and as an adjunct to opioid therapy.

Doses of oral ketamine, particularly starting doses, can be quite low e.g. 10-25mg. The standard strength of oral ketamine solution that should be used is 50mg/5ml and a calculation is required to determine the dose.

What volume of liquid (50mg/5ml) would you administer for each of the following doses of oral ketamine?

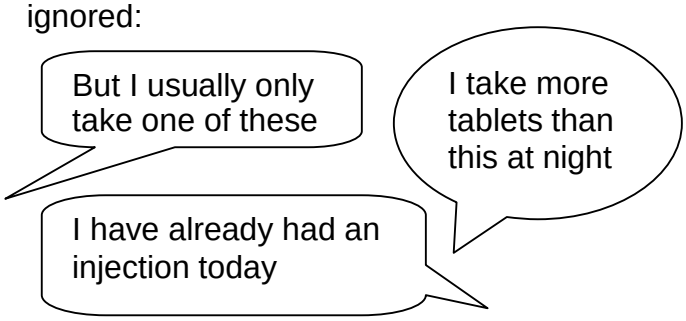
1. Dose prescribed is 10mg.
2. Dose prescribed is 15mg.
3. Dose prescribed is 20mg.

(Answers overleaf)

A listening ear

While medication incidents can occur at any stage of prescribing, dispensing and administration, we tend to think of the person administering the medicine as being the 'last line of defence' in preventing a medication incident from reaching a patient.

However the patient is the true last line of defence. Sometimes medication incidents have been reported where a patient tried to say that something was wrong but they were ignored:



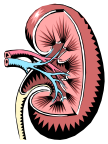
It is important not to dismiss a patient's concerns. The patient could be giving vital clues to a wrong dose having been prescribed or where a medication history is incomplete.

Equally there may be other explanations for their concern. Medicines or doses may have changed since the patient was admitted, a different strength of tablet is being used in hospital or the tablets used in hospital have a different appearance. Patients may also be confused about their medicines.

Safety Tips

- ☑ Don't automatically assume the patient doesn't know what they are talking about.
- ☑ If a patient has any doubts about their medication, check them out before administering the medicines.
- ☑ Remember, listen to what patients say.

Dosing of medicines in renal impairment



A number of medication incidents have been reported where a patient has received the wrong dose of medication as a result of using eGFR as the basis for making dose adjustments instead of creatinine clearance.

Laboratory services in Northern Ireland now report eGFR (estimated glomerular filtration rate) alongside a patient's serum creatinine measurement. The eGFR is calculated using the MDRD (Modification of Diet in Renal Disease) formula and is useful in the detection and assessment of chronic kidney disease. The MDRD formula uses serum creatinine, age, sex and race with the result normalised to a body surface area of 1.73m^2 and reported as ml/minute/1.73m^2.

However medicine dose adjustments for renal impairment are largely based on creatinine clearance (ml/minute). This is best derived from a 24 hour urine collection but is often calculated from a formula such as Cockcroft and Gault equation. This formula uses serum creatinine, weight, sex and age to estimate creatinine clearance (CrCl), with the result given in ml/minute.

Did you know…

… that gliclazide 80mg and gliclazide 30mg m/r (modified release) may be considered to be approximately equivalent in therapeutic effect?

Safety tips

- ☑ Be aware of the different formulations of gliclazide, particularly when taking a medication history.
- ☑ Check that the dose and frequency correspond with the formulation.
- ☑ Take care when prescribing, ordering, dispensing or administering gliclazide – make sure you select the correct formulation.

If you have any comments on this newsletter, please contact Angela Carrington, Medicines Governance pharmacist on Ext: 5724 at Royal Hospitals or by e-mail at angela.carrington@royalhospitals.n-i.nhs.uk
Further copies of this and previous newsletters can be viewed at www.dhsspsni.gov.uk/index/pas/pas-governance.htm or on your Trust intranet.

NPSA news

The National Patient Safety Agency (NPSA) issued a 'Safer Practice Notice' in May 2006 – 'Ensuring safer practice with high dose ampoules of diamorphine and morphine.' A circular from DHSSPS in July 2006 also highlighted this work.

A number of actions are required by the notice, including a review of systems for prescribing, labelling, supplying, storing and administering diamorphine and morphine.

The notice has been issued in response to a number of reports of death and harm due to the inadvertent administration of high dose (30mg or greater) diamorphine or morphine injection.

One aspect highlighted is that on occasion high doses (30mg or greater) have been prescribed as first doses for patients who had not previously received doses of opiates.

Do you know the usual starting doses of diamorphine and morphine?

See BNF 52 section 4.7.2 for dose details.

The NPSA notice can be seen at www.npsa.nhs.uk

Please note there is an ongoing shortage in supply of diamorphine.

Hold it!

A number of medication incidents have been reported where medicines that were intended to be temporarily withheld, have been administered. In some cases administration occurred against a prescription that had been left current on the Kardex but with 'Hold' written somewhere alongside it.

Safety tips

- ☑ Where a medicine is to be temporarily withheld, the prescriber should either:
  - Discontinue the prescription or
  - Where the Kardex design allows, enter the appropriate code, for example DR in the administration section of the Kardex for each dose that is to be withheld.
- ☑ Annotate the Kardex and make an entry in the notes that the medicine is being withheld.
- ☑ Ensure that regular review is conducted so that it is clear if and when the medicine is to restart.

Answers 1. 1ml 2. 1.5ml 3. 2ml