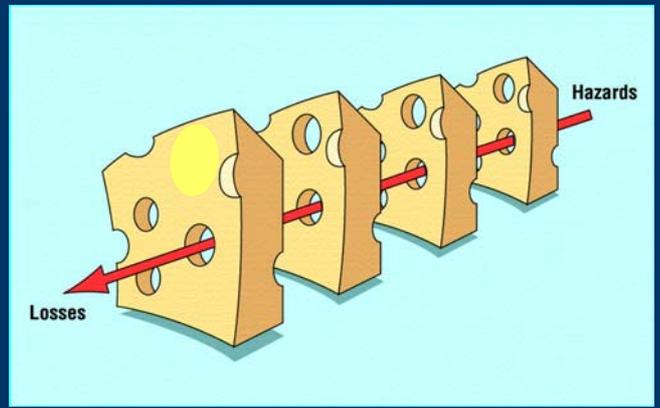


Medication Safety Today



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Watch out



The dose of enoxaparin (Clexane®) should be reduced in patients with severe renal impairment.

Why?

Reduced renal function can lead to an increase in side effects such as haemorrhage since enoxaparin is not removed from the body so quickly.

The recommended doses for patients with a creatinine clearance of less than 30ml/min are shown in the table below.

	Standard dose	Dose in patients with creatinine clearance less than 30ml/min
Prophylaxis of venous thromboembolism (DVT and/or PE)	20mg once daily	20mg once daily
	40mg once daily	20mg once daily
Treatment of venous thromboembolism	1.5mg/kg once daily	1mg/kg once daily
Treatment of unstable angina or non-Q wave myocardial infarction	1mg/kg twice daily	1mg/kg once daily

U can nt abrv 'Patient safety'



We often use unapproved abbreviations to speed things up. This may work for text messaging but not in healthcare. The use of unapproved abbreviations has led to patients receiving wrong medicines and wrong doses, sometimes with serious consequences including fatalities.

Do you know which of the following are approved abbreviations?

- | | | |
|---------|--------|--------|
| a) ISMN | d) AZT | g) MTX |
| b) iu | e) u | |
| c) mcg | f) µg | |

See below for answers.

Answer

None of these are approved abbreviations - all have caused patients to receive wrong medicines or wrong doses.
Remember (1) There are no approved abbreviations for 'units' or 'micrograms'. (2) Do not abbreviate medicine names.



'Three is a magic number'



And not just for the advertisers of BBC 3! Three is an important number in the safe administration of medicines too. The 'More than three' rule is a practical safety tip for anyone administering doses to adults.

Tablets, capsules and ampoules are usually manufactured in strengths that match adult doses, for example flucloxacillin 250mg and 500mg capsules.

The 'More than three' rule states that **if you need more than three tablets, capsules, ampoules etc of any one medicine to administer a dose, stop and check that you have the correct preparation and that the prescribed dose is correct.**

There are some limitations with the 'rule', for example:

- Medicines such as prednisolone - where multiples of 5mg tablets are commonly used.
- Bottles of liquid medicines - where any volume can be measured.
- Paediatric patients - since most medicines are manufactured to fit with standard adult doses; often a whole ampoule or tablet can be well in excess of a paediatric dose, never mind three of them!

Using this rule has worked successfully to detect the following medication incidents prior to administration of the dose.

- Carbimazole 200mg was prescribed instead of 20mg – ten 20mg tablets would have been needed to administer this dose.
- Salbutamol infusion dose and rate was calculated at ten times what was intended – there were insufficient ampoules available at ward level to prepare the infusion.
- Glipizide 80mg was prescribed instead of gliclazide 80mg – sixteen glipizide 5mg tablets would have been needed to administer the dose.

**If You Need More Than Three
- Check**



Double Vision

Do you ever see double?

Sometimes patients are inadvertently prescribed two medicines from the same therapeutic class. A review of reported medication incidents shows that this occurs more frequently with certain classes of medication, for example, proton pump inhibitors or statins. This type of incident can lead to the patient taking an unnecessary medicine or experiencing additional side effects.

How can this be avoided?

When prescribing, administering or dispensing a medicine, always check that the patient is not receiving another medicine from the same therapeutic class.

Puzzling packs

Medication incidents involving similar packs continue to be reported. They can occur when familiar packaging changes, or when new products come onto the market. For example, Priadel® 200mg tablets (lithium carbonate), previously available in a grey tub, are now provided in blister packs. The appearance of the outer cardboard box is very similar to Priadel® 400mg tablets.



Another example shows two new vaccines for childhood immunisation where the products have both similar names and packaging.



Safety tips:

- ! Be alert for changes in packaging.
- ! Consider storing products with similar packaging in different locations.
- ! Report any incidents.
- ! Don't use packaging as the only basis for identifying medicines.

ALWAYS READ THE LABEL!



Did you know?



Acarbose tablets should be chewed with the first mouthful of food or swallowed whole with a little liquid immediately before food.

Why?

Acarbose works by delaying the digestion and absorption of carbohydrates (sugars) from the diet. To be effective it must be taken at the beginning of a meal as above.

Child's play



One of the reasons children are at increased risk of medication incidents is because of the need for additional calculations. This occurs because:

- doses must be calculated according to the child's weight; and,
- many medicines are only available as adult dose forms, therefore requiring manipulation to prepare doses for children.

To reduce the risk of calculation errors in children:

- ✓ Ensure competency in calculating paediatric doses. Can you calculate the volume of medicine required in the examples below?
- ✓ Double check dose, volume and rate calculations. The child's weight in kg should be clearly documented on the kardex to facilitate this.
- ✓ Do not abbreviate the word micrograms as mcg and µg can be easily confused with mg.
- ✓ Use a suitable reference source such as Medicines for Children (2nd edition).
- ✓ Use an oral syringe to measure liquid doses that are not multiples of 5ml.

Practice calculations

- (1) A 10kg child requires metronidazole 5mg/kg three times a day. What volume of a 200mg/5ml suspension is required for each dose?
- (2) A 25kg child requires carbamazepine 5mg/kg twice a day. What volume of a 100mg/5ml suspension does the child require for each dose?
- (3) A 15kg child requires cefotaxime injection 50mg/kg twice a day. The 1g vial should be reconstituted with 3.5ml water for injection to give 1g in 4ml. What volume should be injected for each dose?

Answers – see bottom of page.

If you have any comments on this newsletter or would like to suggest an article, please contact Tracey Boyce, the Medicines Governance pharmacist on ext 5724 at the Royal Hospitals or by e-mail at Tracey.boyce@royalhospitals.n-i.nhs.uk.

The Medicines Governance team website can be viewed at: www.dhsspsni.gov.uk/pgroups/pharmaceutical.

Answers

(1) 1.25ml (1) 1.25ml (1) 1.25ml (2) 8.25ml (2) 8.25ml (3) 3ml (3) 3ml