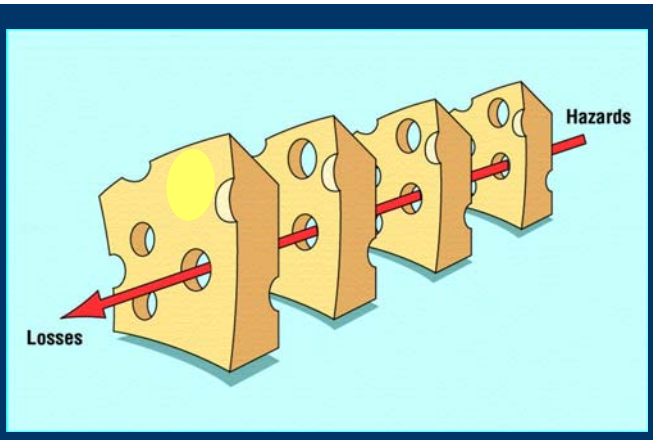
Medication Safety Today



Issue 5 **The Northern Ireland Medicines Governance Project Newsletter** November 2003

Allergy

- Every year patients in the UK die due to allergic reactions.
- In a recent Northern Ireland audit, one in five inpatient prescription charts (Kardexes) contained no allergy status information. Each of these patients is at increased risk of receiving a medicine they are allergic to.
- Obtaining an accurate allergy history is essential but can be difficult**.** The following questions may be helpful:
  - Have you ever received any medicines that have disagreed with you or caused an allergic reaction? (these could be prescribed by a doctor, administered while in hospital or bought over the counter).
  - If yes, can you remember the name(s) of these medicine(s)?
  - Can you describe the reaction that you had?
  - How soon after taking the medicine did the reaction happen?
  - How long ago was this?
  - Did your doctor/nurse/pharmacist tell you this was an allergic reaction or did you decide for yourself?
  - Have you ever received this medicine or a similar one again?
  - If yes, did you have the same sort of reaction?
- Document this information clearly, using the approved name of the medicine and the type of the reaction, so that it is available to all staff, for example, 'penicillin – anaphylaxis'.
- Remember to document when a patient has no known allergies.

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

Intravenous phenytoin

Medication incidents related to the incorrect administration of IV phenytoin have been reported. There are two methods of administering phenytoin.

Method 1	Method 2
Undiluted by slow IV injection into a large vein via a large gauge needle or catheter (at least 20 gauge).	Diluted in 50-100ml sodium chloride 0.9%. Final concentration must not exceed 10mg/ml. The infusion must be completed in 1 hour and be administered via a 0.22 – 0.5 micron in-line filter.

Safety tips

- Do not exceed maximum rate of administration 50mg/minute (adults) and 1-3mg/kg/minute (neonates & children).
- Use a rate controlled infusion device where necessary.
- Precede and follow each injection with a sodium chloride 0.9% flush, through the same needle or catheter.
- Monitor for infusion reactions.
- Patients on IV phenytoin require continuous monitoring of ECG and blood pressure.

For further advice please contact Medicines Information.

Did you know ? ...

Tiotropium (Spiriva®) is a long acting antimuscarinic bronchodilator used for maintenance treatment of chronic obstructive pulmonary disease.

- It is not suitable for relief of acute bronchospasm.
- Co-administration with other anticholinergics such as ipratropium (Atrovent®) and oxitropium (Oxivent®) has not been studied and therefore is not recommended.
- The once daily dose of 18micrograms is contained in a single capsule. Patients should take two breaths through the HandiHaler® device to receive the full dose.

Read the label !

How often have you heard this when a medication incident has occurred?

While there is no substitute for reading the label, small label print and similar looking products are just some of the problems that have not made it easy for people to select the correct product and use it correctly.

The Medicines Control Agency (now part of the MHRA) has acknowledged that improvements could be made in the labelling and packaging of some medicines and have issued best practice guidance.[1]

This document came into effect on 1st March 2003 and sets out what factors should be considered by the pharmaceutical industry when designing medicine packaging and labelling for new products. The principles of the guidance require the label information to be legible, complete and easily understood and that packaging is designed to make it easier to distinguish between different products.

These improvements in new products will take time to filter through.

Safety tips:

- ! Be aware of the risks of similar packaging.
- ! Be alert for changes in packaging.
- ! Store products with similar packaging in different locations.
- ! Report incidents involving packaging and labelling.
- ! Look for alternative products where available.
- ! And remember – **read the label!**

1. Best practice guidance on the labelling and packaging of medicines. Medicines Control Agency December 2002.

Watch out!

Medicines with similar names continue to cause problems.

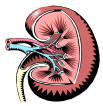
- Confusion has occurred between ris**peridone** (an antipsychotic) and ris**edronate** (a bisphosphonate).
- Ris**peridone** 5mg in the morning has been prescribed or administered when ris**edronate** 5mg in the morning was intended.

Be alert – risperidone 5mg in the morning is an unusual dose. If you see it, check it out.

Coming soon...

Watch out for the Christmas quiz edition where there are three £20 Marks and Spencer vouchers to be won!

Did you know ?...



that combination products of calcium & vitamin D, such as Calcichew D_3, are unsuitable for use in patients with severe renal impairment?

Vitamin D requires hydroxylation by the kidney to its active form. Patients with severe renal impairment, who require calcium and vitamin D supplementation, should be given the hydroxylated form of vitamin D, i.e. alfacalcidol or calcitriol, and a separate calcium preparation.

IV Administration

A recent study has shown that almost half of all intravenous (IV) drug doses given in hospital are associated with an error.[1] This study showed that most errors occur when administering a bolus dose or making up drugs that require multiple step preparations.

The potentially severe errors reported were:

- Preparing the whole contents of a vial containing 125,000 units of heparin as a continuous infusion, resulting in a five times overdose.
- Not mixing the final solution on injecting 750mg vancomycin into an infusion bag.
- Not preparing a new adrenaline infusion on time, resulting in low blood pressure readings.

Safety tips include:

- Use the IV route only when no other route is available.
- Where calculations or manipulations are complex, ask for a second check.
- Make use of ready prepared solutions when they are available.
- **Slow** IV bolus means over 3 to 5 minutes.
- Sources of information for the preparation and administration of IVs include BNF, Summary of Product Characteristics, and the pharmacy department.

1. Taxis K and Barber N. Ethnographic study of incidence and severity of intravenous drug errors. BMJ 2003; 326: 684.

Take care with oxycodone

Medication incidents have occurred with oxycodone preparations.

- **OxyContin**® is the controlled release preparation, usually given twice daily.

  OxyNorm® is the immediate release preparation.

- OxyNorm® oral liquid is available in two very different strengths - 5mg/5ml and 10mg/1ml.

Mix-ups with these preparations can cause an overdose of opiate for the patient or can mean the patient gets less analgesia than they need.