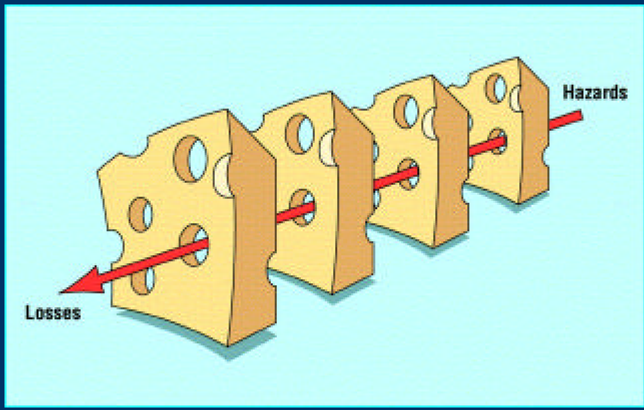
Medication Safety Today



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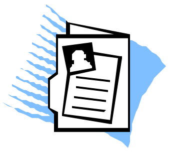
All change



Most Kardexes state that any changes to a prescribed medicine should be made by rewriting the prescription in full. While this may seem tedious at times, it is an essential part of safe prescribing.

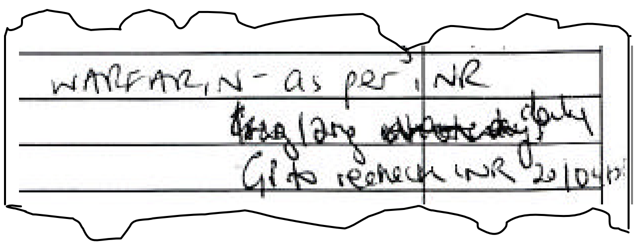
Rewriting the prescription ensures that:

- The new dose and/or frequency are clearly visible.
- There is a record of when the prescription was changed and by whom.
- Monitoring of the patient's response to the change in prescription is easier to track.

Remember

- To discontinue the previous prescription.
- To take previously administered doses into account when writing the new prescription, indicating clearly when the first dose of the new prescription is to be given.

Please note that this applies to other prescriptions, such as discharge prescriptions. Below is an example of a discharge prescription where the original dose of '1mg/2mg on alternate days' was altered to '2mg daily' but could have been misread as '12mg daily'.



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.

Answers	(1) 0.5ml (2a) 60mg (2b) 6ml (3) 250mg (4) 50g

Calculations

1. A patient has been prescribed haloperidol 1mg. They are to receive the oral liquid medicine which is available as 2mg/ml. What volume of liquid is required?
2. A 3 year old child, weighing 15kg, requires a once daily prophylactic dose of trimethoprim 2mg/kg.
   a) What dose do they require?
   b) Trimethoprim is available as a 50mg/5ml oral liquid medicine. What volume do they require?
3. How many milligrams in 10mls of a 2.5%w/v solution?
4. How many grams of glucose are in a 500ml infusion bag of glucose 10%w/v?

Answers at the bottom of the page

Right on time

Unintentional omission of antiparkinsonian medicines can have serious consequences for the Parkinson's patient, such as difficulty moving or disturbed sleep. Their bowel and kidney function may also be affected and mood swings can be triggered.

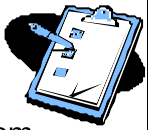
Ensuring that antiparkinsonian medicines are administered as prescribed as well as maintaining disease control for the patient can shorten hospital stays and reduce the chance of people being readmitted after discharge from hospital.

Safety tips

- If an antiparkinsonian medicine is unavailable on the ward, do not assume that someone else has organised the supply. Find out when the dose will be available.
- If a dose cannot be given, for any reason, inform the prescriber so that appropriate action can be taken.
- When reviewing patients, always check the administration record of the Kardex to confirm that patients are receiving their antiparkinsonian medicines as prescribed.
- If an antiparkinsonian medicine is prescribed at times other than the usual medicine round times, take steps to ensure the patient receives the medicines as prescribed.

Further information is available from www.parkinsons.org.uk

Not just a shopping list

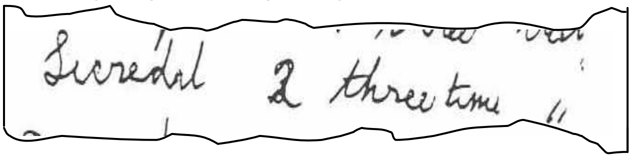


Patients and carers often prepare and bring their own list of medicines into hospital with them. They can be very useful, for example if a patient is admitted in the middle of the night without any GP information or any other details of their medication. However it is important that such lists are also treated with caution.

A number of safety issues have arisen with handwritten lists, which include:

- Medicines being prescribed for the wrong patient because a handwritten list of medicines with no patient name on it was attached to the wrong set of notes.
- The wrong medicine being prescribed due to handwriting being misread.

For example, this is a section from a handwritten list that included Lioresal® (baclofen) but was misread as Sevredol® (morphine sulphate).



- The wrong dose being prescribed because the dose was expressed as the number of tablets rather than the dosage in milligrams or micrograms.
- The wrong frequency being prescribed because the list had not been kept up to date.

Safety tips

- ✔ If a patient or carer gives you their own prepared list of medicines, check that the patient's name is on the list before using.
- ✔ Medicine names may not be correct, take particular care with handwriting.
- ✔ The dose may not be correct or the strength missing – sometimes patients will write a dose in a way that makes sense to them but that you may misinterpret.
- ✔ Check that the medication history corresponds with and is appropriate for the patient's medical history.
- ✔ Verify the information with the patient or carer wherever possible, to confirm that the list is accurate and up to date.
- ✔ Always try to confirm the details on the list with another source, such as a GP print-out, when this becomes available.

Answers

(a) 15mg (b) 10mg (c) 135-189mg (d) 5mg

Opioid exchange rates

Inappropriate dose conversions between different opioids have been reported. These can lead to patients being either dangerously overdosed or not receiving sufficient pain control. Opioid dose conversion guidance is available from a number of sources which include the BNF, General Palliative Care Guidance for Control of Pain in Patients with Cancer, Palliative Care Formulary, Pharmacy/Medicines Information, pain and palliative care teams and ward pharmacist.

Remember

- To keep a patient under close observation during conversion between opioids as patients may vary in their response to the change.
- Caution should be exercised in the elderly and in patients with kidney disease or liver impairment. Consider dose reductions.
- If changing from one opioid to another because of toxicity, a dose reduction of 30-50% may be necessary.
- Take care when transferring a patient from a parenteral / oral opioid to a transdermal patch or vice versa. The following should be remembered when assessing pain control and signs of toxicity.
  - ➢ Steady state of fentanyl patches is only achieved after 15-18 hours. When discontinuing a fentanyl patch replacement with other opioids should be gradual, starting at a low dose and increasing slowly.
  - ➢ Please note that for buprenorphine patches, opioids should NOT be administered within 24 hours after removal of the patch.
- Ensure that patients who are prescribed regular opioids are also prescribed opioids for breakthrough pain. The breakthrough dose should be equivalent to about one-sixth of the total 24 hour opioid dose.

Can you calculate the following?

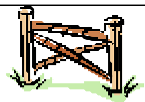
(a) 30mg oral morphine = __ s/c morphine

(b) 20mg oral morphine = __ oral oxycodone

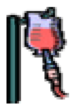
(c) 50 microgram/hour fentanyl patch = __ of the 24-hour oral morphine dose

(d) The 'breakthrough' dose required for a patient prescribed morphine sulphate M/R (e.g. MST®) 15mg twice daily = __ of oral morphine

Answers at the bottom of the page



The last hurdle



Thorough second checking of intravenous infusions is regarded by many as essential in the safe administration of this high risk group of medicines.

However it is important that the focus of second checking is not only on the preparation stages. Thorough second checking covers the entire preparation and administration stages and includes setting the rate on any infusion device. Second checking of the infusion rate is also important where any changes to the rate are required or where the infusion has to be interrupted.

Remember, don't fall at the last hurdle. Include the rate setting in your second check of intravenous infusions.