Medication Safety Today

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The 3Rs: Report, Report, Report

Have you ever wondered what it would be like if there was no mechanism for reporting when things go wrong?

Medication incidents are nothing new. However without incident reporting we miss the opportunity to learn from our mistakes. More importantly, we miss the opportunity to review the systems in which we work and make the necessary changes to avoid the same incident happening again. This applies to all incidents, not only those which result in patient harm.

Consider how incident reporting has contributed to changes in the way you work and how this has impacted positively on patient safety.

Report medication incidents using your local incident reporting mechanisms.

Give it on time

Avoiding omitted and delayed doses of medicines

Calling all prescribers!

If you prescribe a new medicine or a STAT dose of a medicine, you must inform a member of nursing or midwifery staff to enable timely administration.

If you have any comments on this newsletter, please contact Sharon O'Donnell, Medicines Governance pharmacist on Ext: 38129 at the Royal Hospital or by e-mail at Sharon.ODonnell@belfasttrust.hscni.net
Further copies of this newsletter can be viewed at www.medicinesgovernanceteam.hscni.net or on your Trust intranet.

Did you know?

... that systemic fusidic acid should not be given with statins because of a risk of serious and potentially fatal rhabdomyolysis. [1-2]

The MHRA has reported an increase in the number and severity of case reports of rhabdomyolysis (including fatalities) suspected to be due to an interaction between fusidic acid and a statin. The MHRA further advise that as the mechanism for this interaction is unknown it could occur with some, or all, statins.

Safety Tips - as advised by MHRA

- Systemic fusidic acid should not be given with statins because of a risk of (potentially fatal) rhabdomyolysis.
- In patients for whom the use of systemic fusidic acid is essential, statin treatment should be temporarily discontinued throughout the duration of fusidic acid treatment.
- To ensure clearance of systemic fusidic acid, statin therapy may be reintroduced 7 days after the last dose of systemic fusidic acid.
- In exceptional cases where prolonged systemic fusidic acid treatment is necessary, the need for co-administration of a statin should be considered on an individual basis and only under close medical supervision.
- Patients should be clearly advised to seek medical advice immediately if they experience any symptoms of muscle weakness, pain, or tenderness.
- Any muscle symptoms reported in patients who are prescribed statins should be followed up.

MHRA has highlighted other interactions previously between statins, for example clarithyromycin in their Drug Safety Update.[3] Drug Safety Updates are available at http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/index.htm

1. Drug Safety Update Sept 2011. Vol 5 issue 2: A1 http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON128951 [accessed 28 June 2012]
2. Kearney S, Carr AS, McConville J et al. Rhabdomyolysis after co-prescription of statin and fusidic acid. *BMJ* 2012; 345:e6562 [accessed 22 October 2012]
3. Drug Safety Update January 2008; Vol 1, Issue 6: 2 http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON084705 [accessed 5 October 2012]

Right or Wrong?

Always take care when administering medicines that are available in different formulations. Sometimes the actual medicine may be correct but the wrong formulation has been selected. Examples include:

1. Ordinary release morphine sulphate (Sevredol®) administered instead of modified release morphine sulphate (MST®)

2. Ordinary release oxycodone (Oxynorm®) administered instead of modified release oxycodone (Oxycontin®)

How can we prevent these types of incidents?

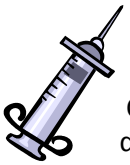
- Check that the formulation corresponds to the expected frequency.
- Brand names should be used for oral opiates to help differentiate between different formulations.

Ready to go

Many patients attending for elective surgery may have previously attended a pre-operative assessment or pre-admission clinic. Details of the patient's medication will often have been recorded at these clinic visits. However this medication record should be used with caution on admission to hospital as medicines and doses may have changed since the clinic appointment which may have been conducted some time ago.

Safety Tip

- ✔ Always use up to date sources to confirm a medication history.



HEPARIN FLUSHES

Confusion sometimes exists when prescribing, dispensing or administering heparin and heparin sodium flushing solutions. To avoid errors the following is recommended:

- ✓ Heparin sodium flushing solutions must be referred to using the generic name.
- ✓ Heparin sodium flushing solution is available in two different strengths 50units in 5ml and 200units in 2 ml.
- ✓ Prescriptions / orders and instructions to administer heparin sodium flushes should provide clear dosing information e.g. dose, volume and frequency.

CHECK THE SMALL PRINT

Various forms of medicine charts exist in community settings, residential and nursing homes. When a patient is admitted to hospital, it is often easy to accept that the copy of the kardex that arrives with the patient belongs to that patient. However occasionally the kardex may belong to someone else.

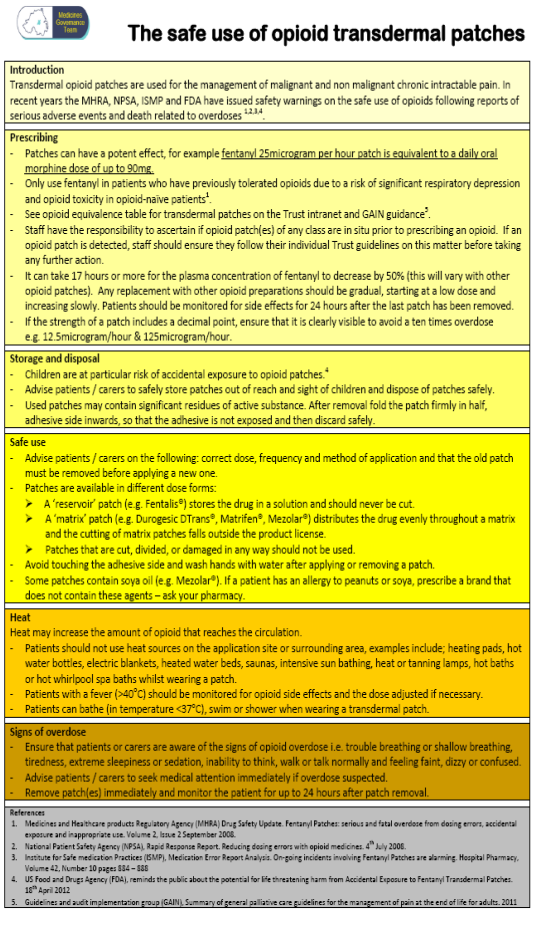
Safety Tips

- ✔ Always remember to check the patient details on the kardex and ensure they match the patient that you are admitting.
- ✔ If the copy of the kardex is of poor quality, contact the residential or nursing home to confirm details.
- ✔ Complete the medicines reconciliation proforma and use more than one source of information to confirm a medication history.
- ✔ If the patient is admitted out of hours and the medication history is incomplete, ensure that new staff coming on duty are aware of the need to confirm any medication history with the GP.

Opioid Patches

Opioid medicines are designated as 'high alert medications' and are often reported as causing serious adverse events and deaths related to overdoses. A poster has been developed to reinforce the key safety factors associated with opioid patches (prescribing, storage, disposal, safe use, heat and signs of overdose).

Please look out for this poster on your ward.



The safe use of opioid transdermal patches

Introduction
Transdermal opioid patches are used for the management of malignant and non malignant chronic intractable pain. In recent years the MHRA, NPSA, ISMP and FDA have issued safety warnings on the safe use of opioids following reports of serious adverse events and death related to overdoses [1,2,3,4].

Prescribing
- Patches can have a potent effect, for example fentanyl 25microgram per hour patch is equivalent to a daily oral morphine dose of up to 90mg.
- Only use fentanyl in patients who have previously tolerated opioids due to a risk of significant respiratory depression and opioid toxicity in opioid-naïve patients[1].
- See opioid equivalence table for transdermal patches on the Trust intranet and GAIN guidance[2].
- Staff have the responsibility to ascertain if opioid patch(es) of any class are in situ prior to prescribing an opioid. If an opioid patch is detected, staff should ensure they follow their individual Trust guidelines on this matter before taking any further action.
- It can take 17 hours or more for the plasma concentration of fentanyl to decrease by 50% (this will vary with other opioid patches). Any replacement with other opioid preparations should be gradual, starting at a low dose and increasing slowly. Patients should be monitored for side effects for 24 hours after the last patch has been removed.
- If the strength of a patch includes a decimal point, ensure that it is clearly visible to avoid a ten times overdose e.g. 12.5microgram/hour & 125microgram/hour.

Storage and disposal
- Children are at particular risk of accidental exposure to opioid patches.[4]
- Advise patients / carers to safely store patches out of reach and sight of children and dispose of patches safely.
- Used patches may contain significant residues of active substance. After removal fold the patch firmly in half, adhesive side inwards, so that the adhesive is not exposed and then discard safely.

Safe use
- Advise patients / carers on the following: correct dose, frequency and method of application and that the old patch must be removed before applying a new one.
- Patches are available in different dose forms:
  - A 'reservoir' patch (e.g. Fentalis®) stores the drug in a solution and should never be cut.
  - A 'matrix' patch (e.g. Durogesic DTrans®, Matrifen®, Mezolar®) distributes the drug evenly throughout a matrix and the cutting of matrix patches falls outside the product license.
  - Patches that are cut, divided, or damaged in any way should not be used.
- Avoid touching the adhesive side and wash hands with water after applying or removing a patch.
- Some patches contain soya oil (e.g. Mezolar®). If a patient has an allergy to peanuts or soya, prescribe a brand that does not contain these agents – ask your pharmacy.

Heat
Heat may increase the amount of opioid that reaches the circulation.
- Patients should not use heat sources on the application site or surrounding area, examples include; heating pads, hot water bottles, electric blankets, heated water beds, saunas, intensive sun bathing, heat or tanning lamps, hot baths or hot whirlpool spa baths whilst wearing a patch.
- Patients with a fever (>40°C) should be monitored for opioid side effects and the dose adjusted if necessary.
- Patients can bathe (in temperature <37°C), swim or shower when wearing a transdermal patch.

Signs of overdose
- Ensure that patients or carers are aware of the signs of opioid overdose i.e. trouble breathing or shallow breathing, tiredness, extreme sleepiness or sedation, inability to think, walk or talk normally and feeling faint, dizzy or confused.
- Advise patients / carers to seek medical attention immediately if overdose suspected.
- Remove patch(es) immediately and monitor the patient for up to 24 hours after patch removal.

References
1. Medicines and Healthcare products Regulatory Agency (MHRA) Drug Safety Update. Fentanyl Patches: serious and fatal overdose from dosing errors, accidental exposure and inappropriate use. Volume 2, Issue 2 September 2008.
2. National Patient Safety Agency (NPSA). Rapid Response Report. Reducing dosing errors with opioid medicines. 4th July 2008.
3. Institute for Safe medication Practices (ISMP). Medication Error Report Analysis. On-going incidents involving Fentanyl Patches are alarming. Hospital Pharmacy, Volume 42, Number 10 pages 884 – 888
4. US Food and Drugs Agency (FDA), reminds the public about the potential for life threatening harm from Accidental Exposure to Fentanyl Transdermal Patches. 18th April 2012
5. Guidelines and audit implementation group (GAIN). Summary of general palliative care guidelines for the management of pain at the end of life for adults. 2011.