MedSafe: sharing learning

Medication incident data collated and reviewed by the Trusts Medicines Governance Team on behalf of the HSC Trusts

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The following medication incidents have been reported in HSC Trusts during July to September 2014. Learning points have been identified for HSC staff to promote safer prescribing, dispensing and administration of medicines and facilitate shared learning between HSC trusts.

Patient prescribed midazolam 2mg subcutaneously for agitation however this was administered intravenously. Flumazenil administered and patient monitored. This occurred in an area where midazolam is administered intravenously for conscious sedation.

- Check the prescribed route of administration when administering medicines and that the route is appropriate for the indication.

Prasugrel omitted for four days in post ICU, drug marked not unavailable. Prasugrel was prescribed as 10ml rather than 10mg; liquid ordered by ward. As prasugrel is only available in tablet form no liquid preparation was supplied nor any tablets. A second order was placed the following day (Sat) for tablets from an incorrect ward area. Patient complained of chest pain and was commenced on isosorbide mononitrate.

- Where a medicine is unavailable on the ward consider:
  - Is the medicine held as stock in an emergency/ out of hours cupboard?
  - Is the medicine held as stock on another ward?
  - Does the patient have their own medicines?
  - Can you contact on-call pharmacy for advice?

  Follow your trust information on how to access medicines out of hours.

- Where a medicine is unavailable in Pharmacy check local procedures and if required escalate to the Responsible Pharmacist.

Patient was given quick acting insulin instead of regular insulin on the evening medication round. Patient noticed error as soon as she had it administered. On call doctor was informed and instructed that the patient be closely monitored and blood sugars be taken 3 times an hour for 4 hours. Blood sugars before incident 19mmols/L blood sugars at 23:00hrs 17.7mmols/L.

- Ask to see the patient's insulin passport to confirm the correct insulin product to be administered. Wherever possible you should show the insulin to the patient to confirm with them that this is the type of insulin they are expecting to be administered.

Patient attended for elective surgery and was taking garlic capsules which have an antiplatelet effect. Surgery cancelled. Patient had attended a pre-operative assessment clinic and was asked about current medication but states they were not asked about over the counter medicines and the patient did not think that these were relevant.

- When taking a medication history from a patient, always prompt a patient and ask them if they are taking any over the counter medicines such as herbal medicines.

Patient nil by mouth, had a seizure, oral phenobarbital had not been changed from oral to intravenous treatment.

- If a patient is nil by mouth, ensure their regular medicines are reviewed and that any critical medicines are prescribed by an alternative route.

Insulin dependent diabetic admitted for surgery and Trust protocol for perioperative management of a diabetic patient initiated. The patient's usual evening dose of insulin was appropriately omitted and a Variable Rate Intravenous Insulin Infusion (VRIII) commenced. Surgery was cancelled and the insulin infusion stopped, however the patient's regular insulin was not recommenced. Diabetic ketoacidosis developed.

- Start normal diabetic treatment when eating and drinking. Dose adjustment of insulin and/or hypoglycaemic medication may be required. Patients who are insulin dependent (all type 1 diabetic and some type 2 diabetics) must not have an interruption in their insulin administration.

- The insulin infusion should be maintained for 30 to 60 minutes after the subcutaneous insulin has been given.

- For further advice on transferring intravenous insulin infusions to s/c insulin regimens refer to *NHS Diabetes. Management of adults with diabetes undergoing surgery and elective procedures: Improving standards for patients on other types of insulin regimens* or Trust policy.

Diabetic patient had elevated capillary blood glucose for approximately 4 hours despite being on a variable rate intravenous insulin infusion as part of the perioperative management of diabetes protocol. It was noted that when IV fluids had been changed the insulin infusion was not recommenced (IV fluids and VRIII were running through the same line). In response to the rising blood glucose levels (5.5mmol/L at 1400, 13.2 mmol/L at 1600, 16.8mmol/L at 1910 and 18.2 mmol/L at 2125), the rate of VRIII was increased, before it was realised that the VRIII was not infusing.

- If a patient is on an intravenous insulin infusion and their blood glucose is rising, check that the insulin is infusing at the correct rate.

- Ketones should be checked for capillary blood glucose greater than 12mmol/L. If capillary blood ketones are greater than 3 mmol/L or urinary ketones greater than +++ seek senior medical advice.

Diabetic Nurse Specialist attended ward at 18.00hrs and noticed that nursing staff had given Humalog® 20units as prescribed, but the diabetic nurse had documented in the patient's notes to give Humalog® 10 units. Medical notes state doctor aware of change to insulin dose but had not changed the dose on the prescription sheet. Blood sugar checked; 6.7 mmol/L at 19.00hrs. Doctor informed and advice given to check blood sugar half hourly for 2 hours unless hypoglycaemic. Apologies given to patient, and patient to remain in hospital overnight.

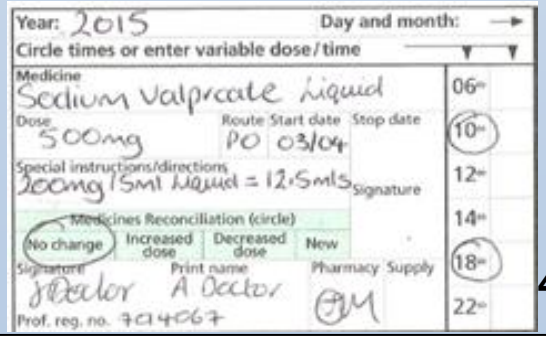
- When a specialist team has been asked to review a patient's treatment regimen, check the patient's medical notes for treatment management advice provided by the specialist team.

Patient was transferred between rooms on the same ward by a healthcare assistant. The patient was on 1/4 litre oxygen. The flow meter was not removed from the wall to the new bed space. The oxygen at the new bed space was put on 1 litre whereas it should only be 1/4 litres. No oxygen had been prescribed on the Kardex. Patient found by doctor to be shaking. He checked the arterial blood gas. Patient found to be hypercapnic and was recommenced on non-invasive positive pressure to correct this. Regular arterial blood gases required.

- Oxygen must be prescribed on the Kardex.
- A patient's oxygen flow rate should be checked when they are transferred to another ward / clinical area.

Patient had been on sodium valproate 500 mg twice daily (liquid) PO which was written up as 12.5ml of 200mg/5ml. Switched to IV but dose prescribed was 50mg twice daily because the Kardex handwriting looked like 20mg/5ml instead of 200mg/5ml, therefore 12.5ml was calculated to be 50mg. Medical notes described increased seizure activity over the period of time of under-dosing (2 - 3 days). Doctor informed and correct dose prescribed.

- Always prescribe dose in terms of strength (e.g. mg) rather than volume.



If you have any comments on this bulletin, please contact Angela Carrington, regional Medicines Governance Team Leader for secondary care on 95041323 or by e-mail at angela.carrington@belfasttrust.hscni.net