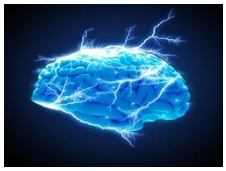
Medication Safety Today

Issue 58 **The Northern Ireland Medicines Governance Team Newsletter** **February 2017**

Phenytoin



A patient safety alert was issued by NHS England for injectable phenytoin. This is used to slow and stabilise erratic electrical brain activity in, for example, status epilepticus, which is a life-threatening medical emergency.

Phenytoin is a particularly complicated drug to use. It is recognised as a critical medicine by UK Medicine Information (UKMI).

Phenytoin has a narrow therapeutic index, meaning that there is little difference between the effective (therapeutic) dose and a larger dose that can cause harm. A loading dose, to quickly raise the amount of the drug in the body, is recommended for injectable phenytoin and guidance on patient safety issues has previously been issued by the NPSA.

Information on prescribing, preparation, administration and monitoring of phenytoin is available in the BNF, Summary of Product Characteristics or the Medusa Injectable medicines guide [1].

- ✓ Check your Trust guidance on how to prescribe, prepare, administer and monitor IV Phenytoin.

References

1. Health professionals can request access to the Medusa Injectable Medicines Guide website via http://medusa.wales.nhs.uk/?ID=4259ceba1cebe84c5c612057f5058dc0752 . Once you have a log-in, use the Medusa search page to identify guidance on phenytoin.

To access all hyperlinks, please see the electronic newsletter via: www.medicinesgovernanceteam.hscni.net

We're not the same!

Please note that there is not a direct strength conversion between different formulations of certain medicines. Direct conversions can result in overdoses. Some examples of these include:

1. Selegiline 1.25mg oral lyophilisate (Zelapar®) is equivalent to selegiline 10mg tablet. Patients receiving 10mg conventional selegiline hydrochloride tablets can be switched to oral lyophilisates (Zelapar®) 1.25mg.

2. Gliclazide MR 30mg is approximately equivalent in therapeutic effect to standard formulation gliclazide 80mg. If a patient is prescribed gliclazide 120mg normal release but is administered gliclazide 120mg MR (4 x 30mg MR tablets), this would be equivalent to a dose of 320mg.

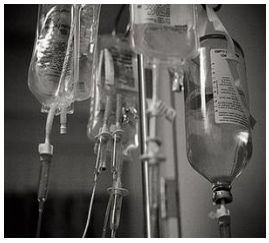
Spot the odd one out!

Which of the following medicines are antiplatelets?

(A) prazosin (B) prasugrel (C) pramipexole (D) ticagrelor (E) tigecycline

If you have any comments on this newsletter, please contact Sharon O'Donnell, Medicines Governance pharmacist on 02890638129 at Royal Hospitals 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.

Infusion Confusion



Incidents sometimes happen when an incorrect fluid has been administered to a patient.

1. Patient admitted to ward with incorrect fluids insitu. Patient prescribed sodium chloride 0.9% and glucose 5%. The IV fluid erected was glucose 5%. Fluids not currently running on admission to ward, but connected to patient.
2. Patient returned to ward with IV fluids running. IV fluid prescribed was sodium chloride 0.45%, however sodium chloride 0.9% running.

BE AWARE

- All intravenous drugs must be checked by two registered practitioners. Check
  - The correct **patient**
  - The correct **medicine** has been selected
  - The correct **rate** has been set
- IV fluids should only be administered if prescribed on the daily fluid balance chart and all sections completed accurately. See Hyponatraemia Repository for more information on fluid prescribing and administration.
- For infusions, any adjustments to rate settings must be witnessed by 2 nurses.
- Once all these checks have been made, and the fluids have been started**, both** practitioners should then sign the daily fluid balance chart.

And who are you?

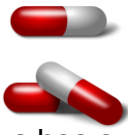
Medication incidents have been reported where patients have been administered another patient's medicines because the Kardex on the end of the bed was for another patient. It doesn't matter how well you know the patient that you are administering medicines to, you must conduct identity checks every time before you administer medicines.

- ✓ Check that the patient details (name, DOB, H&C number) on the armband match the patient details on the Kardex and wherever possible, confirm the details verbally with the patient.
- ✓ For medicines that require a second check, the identity check is part of the second check.

Answers: (B) and (D)

Tacrolimus —Take Care!

The growing number of oral tacrolimus products available on the market increases the potential for inadvertent switching between products, which has been associated with reports of toxicity and graft rejection. Always remember to:



1. Prescribe by brand name

The immunosuppressant drug tacrolimus has a narrow therapeutic index - even minor differences in blood levels have the potential to cause graft rejection or toxicity reactions. Therefore the Medicines and Healthcare Regulatory Agency (MHRA) advises that this drug should be prescribed and dispensed by **brand name only**.

If an unlicensed oral liquid is required (for which there will be no brand name), the **strength and manufacturer** should be specified. These details should be specified on discharge, as per shared-care guideline.

2. Talk Dose

It is also essential to ensure that the correct strength and dosage interval of branded tacrolimus is prescribed and dispensed in order to avoid the risk of graft rejection or toxicity.

Action

- ✓ Prescribe the exact brand, strength and dosage interval, in accordance with the shared-care guideline.
- ✓ Check that the strength and dosage interval corresponds with the indication and the brand prescribed.
- ✓ Brands are not interchangeable without careful therapeutic monitoring. Substitution should be made only under close supervision of a transplant specialist.
- ✓ Pharmacists should always dispense the exact brand prescribed; they should contact the prescriber if the prescription is not clear to ensure the appropriate medicine is dispensed.
- ✓ Patients should be advised to take careful note of the brand name of their usual tacrolimus medicine and should check with their doctor or pharmacist if they receive a different brand or if they have any other questions about the prescription, e.g. about the dose

Further information is available on the MHRA alert and Interface Pharmacist Network for Specialist Medicines (IPNSM) websites.

Acknowledge NI Medicines Management Newsletter Oct 2016