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Medicines Safety Bulletin

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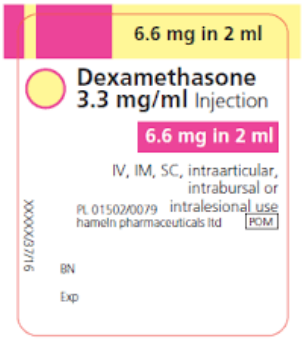
Mis-selection of look-alike sound-alike drugs: Dexmedetomidine vs dexamethasone



The names of some drugs can look and sound very similar and can therefore be easily confused.

A patient preparing for surgery was mistakenly given dexmedetomidine instead of dexamethasone. As a result, the patient became drowsy and needed extra monitoring and oxygen therapy. Their surgery was delayed. Dexmedetomidine is used as a sedative drug in intensive care and operating theatres. It can also slow the heart and lower blood pressure. Dexamethasone is a steroid medicine used to reduce inflammation as well as reducing the risk of nausea and vomiting post-surgery.

Advice for staff:

- Read the drug name aloud when selecting the product and checking the product against the prescription.
- Use electronic processes like automated dispensing cabinets and barcode scanning where available during administration.
- When stored on a shelf or in a cupboard, keep look-alike and sound-alike medications apart from each other.
- Double-check that the medication is appropriate for the patient's indication and aligns with the clinical context.

Overdose with over-the-counter cholecalciferol (vitamin D_3) drops

Several children have been admitted to hospital in Manchester with significantly raised vitamin D_3 levels due to an unintentional overdose of cholecalciferol.

The children had been prescribed a food supplement of vitamin D_3 rather than a licensed medicine in primary care. The drops were found to contain higher levels of vitamin D_3 than that written on the label, and the Food Standards Agency has issued a recall.

Excess vitamin D_3 intake can cause hypercalcaemia (high blood calcium level). This results in a range of effects including anorexia, nausea, vomiting, weakness, lethargy, constipation and non-specific aches and pains, as well as thirst, polyuria, weight loss and cardiac dysrhythmias.

Please bring this newsletter to the attention of all staff

The potential for significant deviation from the labelled concentration when using vitamin D_3 products marketed as food supplements has previously been described. It is recommended that licensed medicinal products are prescribed and supplied by brand for the administration of treatment doses of vitamin D_3.

Refer to local guidance when prescribing vitamin D_3 in children and adults for advice on dosing and formulation.

Hospital-only medication supply at discharge

A patient was diagnosed with a pulmonary embolism (PE) after childbirth. A PE (or DVT) usually requires at least three months' ongoing anticoagulation, but she received only 12 days' supply of enoxaparin on discharge. She was also not referred to the anticoagulation clinic. When she ran out of enoxaparin, she was unable to obtain further supplies from her GP. The patient re-presented with pain and shortness of breath, and a CTPA scan showed the embolism was still present. An untreated PE has a mortality rate of 20% to 30%.

Hospital-only medicines are those where the hospital is responsible for ongoing supply of the medicine. These medicines are designated as 'red' on the South East London Adult Formulary and the SEL Paediatric Formulary. Enoxaparin is one example of a hospital-only medicine. The new South East London Formulary advice for enoxaparin at discharge defines whom is responsible for supply in different clinical situations.

Other hospital-only medicines include clozapine and the direct oral anticoagulants. Always check the SEL Adult Formulary and SEL Paediatric Formulary, do not assume that the patient's GP will be able to provide on-going supplies of medicines.

Essential medication information in discharge letters

To prevent recurrence of errors like this undertreatment of PE, discharge letters should explicitly document the *duration* of treatment for all medicines. If the duration is not yet confirmed, include the plan for confirming the duration e.g. at a future clinic visit.

The method of obtaining ongoing *supplies* also should be written clearly the discharge letter. Both the treatment duration and where to obtain further supplies should be verbally discussed with patients and or carers.

Support patient compliance with injectable medicines

Further learning from this incident relates to patient compliance with self-injection. To support adherence with newly initiated injectable medicines, staff must ensure the patient receives sufficient demonstration and practice of injection technique, and shows competency in injection self-administration. In addition, staff should provide advice on the benefits of treatment and risks of non-compliance.

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