The Royal College of Emergency Medicine

Safety Flash

August 2021

Drug errors in high-pressure or infrequent situations

A 12 month old child presented in peri-arrest. A verbal request for 5mg intraosseous Lidocaine/Lignocaine was given. 10mls of 2% (200mg) Lidocaine/Lignocaine was administered instead, resulting in a seizure and cardiac arrest.

Infrequent emergencies, such as paediatric resuscitation can be stressful and can lead to errors

Potential Mitigation:

- Have **preprepared documentation/cards** for drugs doses, volumes, concentration, routes and indications for time critical medication in both children and adults
- Consider **dilution** of medication to make small dose administration easier/safer e.g. Lorazepam
- Consider **separating high concentration** drugs in resuscitation areas
- Use **closed loop communication**; particularly in PPE, when communication is more challenging. *See Communication errors with PPE*
- Use **in situ simulation** team training for high pressure situations - including full PPE

Remember - flush cannulas
dead space can be significant, especially in paediatric dosing

Link to example dosing chart for intraosseous lignocaine

For Safety Alerts and RCEM issued Safety Flashes see:
www.rcem.ac.uk/SafetyAlerts