

## Section 6

### Drugs

### Addition/update of guidance and rationale

#### Generic changes

- Thirteen new drug guidelines have been developed including: ciprofloxacin, clopidogrel, dexamethasone, dicobalt, doxycycline, patient's own midazolam, misoprostol, obidoxime, ondansetron, potassium iodate, pralidoxime mesylate and tranexamic acid.
- Where a Prescription-Only Medicines (POMs) exemption exists the MHRA has agreed a Patient Group Direction (PGD) is no longer required for paramedics to administer drugs, where a JRCALC drug protocol is issued. Currently POMs exemptions have not been issued for tranexamic acid, therefore a PGD is required. A POMs exemption is not required for dexamethasone as the intravenous preparation is administered orally.
- The dosage and administration tables have been re-designed and now include column headings for initial dose, repeat dose, dose interval, concentration, volume and maximum dose for each drug where appropriate.
- The children's drug doses have been updated following publication of new UK Child Growth Standards. Drug doses have been rounded for practical purposes. Although some doses may differ from the exact dose calculated using dose per/kg formulae, these differences are not clinically significant and will not compromise patient care.

#### Drug Overview

- A table listing possible drug routes for each of the drug guidelines has been included.
- **Table 6.4** lists the drugs and their possible routes of administration. In cases of parenteral administration, where at all possible, intravenous (IV) cannulation should be attempted, except for children in cardiac arrest where intra-osseous cannulation is the preferred method. **NB** If a vein cannot be found it is not necessary to attempt IV cannulation.

#### Adrenaline

- Cardiac arrest:
  - A dose for birth has been introduced.
  - There are changes in the administration schedule to:
  - **Shockable rhythms:** administer adrenaline after the 3rd shock and then after alternate shocks i.e. 5th, 7th etc.
- **Non-shockable rhythms:** administer adrenaline immediately IV access is achieved then alternate loops.
- Adrenaline 1:1000 is now included in the management of asthma in children.
- Half doses of adrenaline in anaphylaxis are no longer recommended in patients taking tricyclic antidepressants.

#### Amiodarone

- A second dose of amiodarone is now given in a shockable rhythm following the 5th shock and dose is dependent on age.
- The following '**acts to stabilise and reduce electrical irritability of cardiac muscle**' replaces **significant sodium channel blocking activity** to clarify the action of amiodarone.

#### Aspirin

- No significant changes.

#### Atropine

- The indication for cardiac arrest in asystole or PEA has been removed.
- It is further emphasised that 'hypoxia is the most common cause of bradycardia in children, therefore interventions to support ABC and oxygen therapy should be the first-line therapy'.
- Information and dosages for organophosphate poisoning is contained in a separate guideline in the CBRNE section.