Adrenaline Injection - 10ml (1:10,000)



Adrenaline Product Range



- Adrenaline BP 1ml (1:1,000)
- Adrenaline Injection 10ml (1:10,000) PFS

Name of the medicinal product

Adrenaline (Epinephrine) Injection 1:10,000

Shelf life 18 Months



1. Qualitative and quantitative composition

| | %w/v |
|--|---------|
| Adrenaline (Epinephrine) as Acid Tartrate BP | 0.01 |
| Sodium Chloride BP | 0.6 |
| Citric Acid Monohydrate BP | 0.16 |
| Sodium Citrate Dihydrate BP | 0.04 |
| Sodium Metabisulphite BP | 0.1 |
| Hydrochloric Acid BP | qs |
| Water for Injections BP | To 100% |
| Nitrogen PF9 | qs |

Pharmaceutical form

A sterile aqueous solution for slow intravenous injection.

3. Clinical particulars

3.1 Therapeutic indications

Cardiopulmonary Resuscitation in adults children and newborn Acute anaphylaxis

3.2 Posology and method of administration

This medicinal product is not intended to deliver volumes of less than 2 mL

Cardiopulmonary Resuscitation

Adults and children over 12 years: 1 in 10,000 (1mg in 10ml) is recommended in a dose of

The procedure for Cardiopulmonary Resuscitation as given in the algorithm which reflects the recommendations of the European Resuscitation Council and the Resuscitation Council (UK) should be employed.

Cardiac arrest: Recommended dose:

<u>Ventricular Fibrillation / Pulseless ventricular tachycardia:</u>
1mg adrenaline IV/IO, repeated every 3-5 minutes until return of spontaneous circulation.

Asystole / Pulseless electrical activity (PEA):

1mg adrenaline IV/IO, repeated every 3-5 minutes until return of spontaneous circulation.

Once a perfusing rhythm is established, if further adrenaline is deemed necessary, the dose should be titrated against response carefully to achieve an appropriate blood pressure. Intravenous doses of 50 microgram are usually sufficient for most hypotensive patients.

Cardiac arrest following cardiac surgery: Cardiac arrest following major cardiac surgery recommends that during the management of such patients, according to guidelines, adrenaline is administered intravenously in doses of up to 100microgram in adults (1ml of 1 in 10000 solution) very cautiously and titrated to effect.

Children under 12 years:

Maximum dose is 1mg.

Management of non shockable asystole and pulseless electrical activity:

10 microgram/kg (0.1ml/kg of 1 in 10000 or 0.01ml/kg of 1 in 1000 solution) repeated every 3-5 minutes.

Management of shockable VF/ pulseless VT:

Adrenaline 10microgram/kg and amiodarone 5mg/kg given after the third shock, once CPR has been resumed. Adrenaline can be repeated every alternative cycle (i.e. every 3-5 minutes during CPR)

In the management of respiratory and circulatory failure in children: First and subsequent dose: 10microgram /kg by IV or IO route.

If needed, further doses of adrenaline should be given every 3-5 minutes

Tracheal administration should be used as a last resort only if there is no alternative. If required, consider giving adrenaline 100 microgram/kg (1ml /kg of 1 in 10000 or 0.1ml /kg of 1 in 1000 solution) via the tracheal tube. This is the least satisfactory route.

Newborn: When adequate ventilation and chest compression have failed to increase the heart rate above 60 beats per minute, adrenaline may be given in a dose of 10-30microgram/kg intravenously as soon as possible (0.1-0.3ml/kg of the 1:10000 solution or 0.01-0.03ml/kg of the 1:1000 solution). This is best given via an umbilical venous catheter.

The tracheal route is not recommended, but if used, the dose is 50-100 microgram/kg (0.5ml/ kg of the 1:10000 solution or 0.05ml/kg of the 1:1000 solution).

Acute Anaphylaxis: Constant vigilance is needed to ensure that the correct strength of Adrenaline solution is used in the treatment of anaphylaxis. Anaphylactic shock kits need to make a very clear distinction between the 1 in 10,000 strength and the 1 in 1000 strength Adrenaline solutions

(The intramuscular route is the first choice route for administration of Adrenaline (1:1000) in the management of anaphylactic shock. It is also important that, where intramuscular injection might still succeed, time should not be wasted seeking intravenous access.)

Intravenous adrenaline should only be administered by those experienced in the use and titration of vasopressors in their normal clinical practice. In adults, titrate IV adrenaline 1 in 10000 using 50 microgram boluses according to response.

3.3 Contraindications

These should be regarded as relative and not absolute contraindications in life threatening emergency situations

Adrenaline is contraindicated in patients with shock (other than anaphylactic shock), organic heart disease, or cardiac dilatation, as well as most patients with arrhythmias, organic brain damage, or cerebral arteriosclerosis. Adrenaline injection is contraindicated in patients with narrow angle glaucoma. Adrenaline is contraindicated for use during general anaesthesia with chloroform, trichloroethylene, or cyclopropane, and should be used cautiously, it at all, with other halogenated hydrocarbon anaesthetics and adrenaline is contraindicated for use in fingers, toes, ears, nose or genitalia.

Adrenaline should not be used during the second stage of labour (see pregnancy and

4. Pharmaceutical particulars

4.1 List of excipients

Sodium Chloride BP Citric Acid monohydrate BP Sodium Citrate Dihydrate BP Sodium Metabisulphite BP Water for Injections BP Nitrogen PF9

4.2 Nature and contents of container

Sterile aqueous solution in glass (Type 1 Borosilicate) prefilled syringes.



