

PROTOCOL FOR THE USE OF TOPICAL ADRENALINE/COCAINE GEL (topAC) AT UHW, CARDIFF

What is topAC?

- Topical adrenaline/cocaine gel is a local anaesthetic preparation used to anaesthetise the wounds of appropriate children's, and some adult lacerations (e.g. needle phobics and patients with learning difficulties).
- It may be used instead of local anaesthetic.
- It is a mixture of adrenaline 1 in 2000 and 5% cocaine
- It is presented as a clear gel in 3 ml jars.

Use

- **INCLUSIONS:** Wounds on the face, scalp, trunk and limbs (it works best on the face and scalp).
- **EXCLUSIONS:** Mucus Membranes
Extremities – fingers, toes, penis, pinna, nose.
Gross abrasions and burns
Care in cases where tissue viability is in question e.g. flap lacerations

Dose

- The maximum dose is determined by the cocaine element and should not exceed **6 mg/kg**, in volume, this is **0.12 ml/kg**.
i.e. A 10 kg baby gets $0.12 \times 10 = 1.2$ ml
- **Do not use a second dose** if anaesthesia incomplete, use 1% lignocaine infiltration, it will hurt less than normal

Application

- The wound should be less than 5 cm and not require surgical debridement.
- The dose is drawn up in a syringe and applied directly into the wound. The wound is then covered with a Tegaderm (Do not put swab under the Tegaderm as it absorbs the gel). A bandage may be applied if required over the Tegaderm.
- Watch for the gel running into nose/eye/mouth and e.g. child licking the gel.
- This is left in situ for 20 to 30 minutes on the face and one hour elsewhere. After this period, there will be a surrounding period of blanching of the skin reflecting the vasoconstrictor action of adrenaline.
- Wipe residual gel from the wound.
- Test the anaesthesia then suture in the conventional manner.
- **Patients should be observed through the whole procedure** (from application of the local anaesthetic to the suturing).

Side Effects and Treatment of topAC Toxicity

- These are extremely rare if it is used properly.
- Include agitation, dilated pupils, tachycardia, hypertension, convulsions, coma and metabolic acidosis
- **TREATMENT:** (in resuscitation with continuous monitoring of vital signs)
 1. Call for urgent help from A&E Senior/Anaesthetist/Paediatrician (depending on patient age)
 2. Give oxygen.
 3. Consider sedation with iv Lorazepam (0.1mg/kg).