

INTRA-NASAL DIAMORPHINE HYDROCHLORIDE

Introduction

Intra-nasal Diamorphine is a fast-acting analgesic for the relief of moderate to severe pain. Giving drugs by the nasal route is well described and has several advantages. The purpose of this document is to provide a robust guideline for Trust Clinicians to follow when prescribing and administering intra-nasal Diamorphine to a child in moderate to severe pain.

Indications for Use

Initial analgesia for traumatic injuries:

- Fractures
- Burns/scalds
- Fingertip injuries
- Suturing.

NB. Particularly useful in children who have no cannula in-situ or in whom alternative analgesia is not suitable or inadequate.

Contraindications for Use

- Children <10kg (consider alternative analgesia)
- Concomitant use of other Opiates or Midazolam
- Known Allergy to Diamorphine
- Children with a head injury / neurological problem
- Epistaxis
- Airway / respiratory problem

Cautions

Diamorphine should be given in reduced doses or with caution to patients with asthma or decreased respiratory reserve. Avoid use during an acute asthma attack

Scope

Children (0-15 years) with moderate to severe pain.

Dosage

Intranasal Diamorphine Dose: 0.1mg/kg. All children receive 0.2ml of the **DILUTED** solution regardless of age / size.

Volume of dilutant is 20/weight (kg) then rounded to 1 decimal point.

e.g. $20 / 18\text{kg} = 1.1111$ so 1.1mls dilutant (normal saline) to be given.

Administration

1. Weigh the child in KG and document this in the notes.
2. Take baseline observations and assess and document pain score.
3. Dose used 0.1mg/kg.
4. Use the chart provided to determine the amount of dilutant (0.9% Normal Saline) required. **The smaller the child the larger the amount of dilutant.**
5. Use an adequate syringe to add the amount of 0.9% Normal saline required to the diamorphine.
6. The mucosal atomiser holds 0.1ml of dead space. Attach atomiser to syringe and discard all but 0.3ml. **All children receive 0.2ml regardless of age / size.**
7. Ask the child to gently tip his/her head back, occluding one nostril gently place the atomizer into the nostril.
8. Push the contents of the syringe into the nostril at the same time ask the child to sniff. Once administered remove from the patient's nostril. To note: The maximum recommended volume per nostril is 1ml.
9. Not all children will co-operate but this is a painless quick method of pain relief. Children may sneeze after administration and or have a funny taste in their mouth.

Absorption

Absorption can be as fast as IV route; therefore the same side effects can occur. Optimum effects last for 20 minutes but pain relief is often experienced for much longer.

No cases of respiratory depression have been documented using this method at these doses but that does not mean it will never occur. Therefore, repeat assessment of observations every 15 minutes is necessary for up to one hour after administration.

Re-evaluation of the child's pain should be sort 60 minutes from first dose.

Appendix 1

Weight (kg)	Dose of diamorphine (0.1mg/kg) for this weight	Volume of saline (mls) to dilute 10mg vial diamorphine	Volume to be given
10	1.0mg	2.0ml	0.2ml
12	1.2mg	1.7ml	0.2ml
14	1.4mg	1.4ml	0.2ml
16	1.6mg	1.3ml	0.2ml
18	1.8mg	1.1ml	0.2ml
20	2.0mg	1.0ml	0.2ml
22	2.2mg	0.9ml	0.2ml
25	2.5mg	0.8ml	0.2ml
30	3.0mg	0.7ml	0.2ml
35	3.5mg	0.6ml	0.2ml
40	4.0mg	0.5ml	0.2ml
50	5.0mg	0.4ml	0.2ml
60	6.0mg	0.3ml	0.2ml

**PLEASE CONSULT A SENIOR CLINICIAN BEFORE PRESCRIBING NASAL DIAMORPHINE
AND CHECK THE STRENGTH OF DIAMORPHINE CAREFULLY BEFORE USE**

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