

Intra-nasal diamorphine

!!Read this first!!

All patients receive 0.2mls

The **concentration** of that 0.2 mls changes.
The **smaller** the child the **greater** the amount of diluent used to achieve the required concentration

Not to be given to children under 10kg body weight unless prescribed and administered by a senior doctor

Technique

Explain the procedure to the child and family. Tilt the child's head back, put a couple of drops at a time down each nostril, and ask the child to sniff hard. This procedure continues until 0.2mls have been administered. The child will probably sneeze. 0.2 mls equal approximately 8-10 drops

The table below lists the volume of diluent (sterile water) that is used to dilute the contents of a 5mg ampoule of diamorphine. Discard all but 0.2mls following controlled drugs procedure. This is dependent on the weight of the child.

Weight (Kg)	Volume of diluent (water) mls added to 5mg ampoule	Resultant dose in 0.2mls	Resultant dose in 0.2mls (micrograms)
10	1.00	1.00 mg	1000
11	0.90	1.11 mg	1110
12	0.85	1.18 mg	1180
14	0.70	1.43 mg	1430
16	0.60	1.67 mg	1670
18	0.55	1.82 mg	1820
20	0.50	2.00 mg	2000
25	0.40	2.50 mg	2500
30	0.35	2.86 mg	2860
35	0.30	3.33 mg	3330
40	0.25	4.00 mg	4000
50	0.20	5.0 mg	5000

This is the weight of the Child

This is the volume to use to dilute diamorphine 5mg ampoule

This is the resulting dose in 0.2mls

N.B. 1 mg = 1000 micrograms

Maximum dose = 5.0mg

Remember:

Use common sense. Weigh the child in Kg. If not possible, refer to weight calculation tables. Children vary in their response to opiates. The onset time of diamorphine via the intranasal route is approximately the same as if given by the IV route.

Make sure staff are aware of administration when handing over care- they may assume no analgesia has been given if they don't see a cannula!

Intra-nasal diamorphine

INDICATIONS:

Clinically suspected limb fractures
Painful and distressing burns
Significant finger tip injuries

CONTRAINDICATIONS:

Child less than 10kg weight. (Only to be administered by a senior doctor)
Concomitant use of other opiates or Midazolam

PROTOCOL:

1. Weigh the child in Kg (if not appropriate use weight estimation charts)
2. Prescribe diamorphine via intra-nasal route. Dose = 100 micrograms/kg
3. Use chart to determine the volume of diluent.
Using a 1ml syringe add said volume to 5mg Diamorphine ampoule.
4. Discard all but 0.2mls of the resultant solution (following controlled drugs procedure).
5. Gently tip child's head and using a 1ml syringe put a couple of drops into each nostril until all 0.2mls have been given.
6. Ask the child to sniff. The child may sneeze.

NB:

**ALL CHILDREN RECEIVE 0.2MLS.
THE SMALLER THE CHILD, THE GREATER THE AMOUNT OF DILUENT
USED.**

IMPORTANT CONSIDERATIONS:

1. Absorption can be as fast as the IV route
2. Parents/Carers should be given an opiate/sedation advice sheet

References:

Alexander-Williams JM, Rowbotham DJ. Novel routes of opioid administration. *British Journal of Anaesthesia* 1998; **81**: 3 - 7

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Hallett A, O'Higgins F, Francis V, Cook TM. Patient-controlled intranasal diamorphine for postoperative pain: an acceptability study. *Anaesthesia* 2000; **55**: 532 - 539

Review Date: April 2004