FENTANYL

PHARMACOLOGY 225

TYPE:

A lipid-soluble synthetic short acting analgesic

ACTION:

- Potent analgesic
- Effective drug for intranasal use because it is rapidly absorbed across mucous membranes

IN:	Onset	2 - 3 min
	Duration	30 - 60 min

USE:

Management of moderate to severe pain in patients aged 1 year and above

ADVERSE EFFECTS:

- Respiratory depression
- Hypotension
- Nausea and vomiting

CONTRAINDICATIONS:

- Altered LOC
- Patient is poorly perfused
- Previous known allergy or adverse reaction
- Bleeding nose or occluded nasal passages
- Women in labour
- Patients < 1 year of age

NB: Allergy to Morphine is not a contraindication to Fentanyl administration

PREPARATION:

Fentanyl - 900mcg in 3ml

DOSE:

Adult and paediatric doses have been calculated to incorporate the dead space of the Mucosal Atomising Device (MAD), in the first administration (spray) which is 30mcg - 0.1ml

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ADULT

ROUTE OF ADMINISTRATION: IN

INITIAL DOSE: 180mcg or 240mcg

Depending on size of patient

To administer **180mcg** – spray in alternate nostrils

• First spray **0.4ml (120mcg)** – Patient receives **90mcg**

Second spray
0.3ml (90mcg)

OR

To administer **240mcg** – spray in alternate nostrils

• First spray **0.4ml (120mcg)** – Patient receives **90mcg**

Second sprayThird spray0.3ml (90mcg)0.2ml (60mcg)

WAIT FIVE MINUTES

SUBSEQUENT DOSES:

If pain remains uncontrolled, additional doses may be administered at 5 minute intervals of **0.2ml (60mcg) up to 0.4ml (120mcg)**, depending on response

With advanced age, smaller than average size and general debility, the

dosage is as followed:

INITIAL DOSE: 120mcg

To administer 120mcg - 2 sprays in alternate nostrils

• First spray **0.3ml (90mcg)** – Patient receives **60mcg**

• Second spray 0.2ml (60mcg)

Subsequent doses: 0.2ml (60mcg) at 5 minute intervals depending on response

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PAEDIATRIC

Patients aged 6 to 12 years the dosage is as follows: INITIAL DOSE: 60mcg or 75mcg

To administer 60mcg

• One spray **0.3ml (90mcg)** – Patient receives **60mcg**

To administer **75mcg**

One spray
0.35ml (105mcg) – Patient receives 75mcg

Subsequent doses: 0.1ml (30mcg) at 5 minute intervals depending on response

Patients aged 1 to 5 years the dosage is as follows:

INITIAL DOSE: 45mcg or 60mcg

To administer 45mcg

One spray
0.25ml (75mcg) – Patient receives 45mcg

To administer 60mcg

• One spray **0.3ml (90mcg)** – Patient receives **60mcg**

Subsequent doses: 0.1ml (30mcg) at 5 minute intervals depending on response

If inadequate or no response to fentanyl, morphine can be used by level 4 and 5 officers