STANDARDISATION OF ANALGESIA AND SEDATION INFUSION SOLUTIONS IN PAEDIATRIC PALLIATIVE PATIENTS RECEIVING END-OF-LIFE CARE AT HOME

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BACKGROUND

Parenteral medication administration by continuous infusion has become a common practice in end-oflife home care setting because **portable infusion pumps are well tolerated** and maintain more nearly **constant drug plasma levels**.

METHODS

Identification: Most commonly used **drugs** Usual **administration routes**

PUROPOSE

To ensure **safe and quality home care** in paediatric patients nearing **end of life** in the community setting, by establishing a standard operating procedure based on elaboration by dose banding.

Literature review: Compatibility and stability in cassette reservoirs

Drug library to be used in end-of-life home care setting

RESULTS

Administration route

- Minimum infusion rate: 0.1 ml/h (implantable port Port A Cath[®]: 0.5 ml/h)
- Maximum infusion rate: 500 ml/h (subcutaneous access: 5 ml/h)

Drug library

DRUG		< 6 Kg	≥ 6 < 11 Kg	≥ 11 < 20 Kg	≥ 20 < 30 Kg	≥ 30 Kg
Morphine (diluted)	MOd	100 µg/ml	200 µg/ml	400 µg/ml	800 µg/ml	1200 µg/ml
Morphine	MO	400 µg/ml	800 µg/ml	1600 µg/ml	2400 µg/ml	4000 µg/ml
Fentanyl	FE	20 µg/ml	40 µg/ml	50 µg/ml	50 µg/ml	50 µg/ml
Midazolam	MI	1000 µg/ml	2500 µg/ml	5000 µg/ml	5000 µg/ml	5000 µg/ml
Morphine + haloperidol	MO	400 µg/ml	800 µg/ml	1600 µg/ml	2400 µg/ml	4000 µg/ml
	+ HA	20 µg/ml	40 µg/ml	80 µg/ml	120 µg/ml	200 µg/ml

Shelf life: 14 days. Maximum infusion period: 5 days.

Experience july 2017 – august 2018

- 6 patients
 - Medium age: 7,1 years (4 months – 19 years)
 Weight range: 6 – 40 Kg
 No medication error or infusionrelated incident were recorded.

22 drug solutions

12 were necessary
10 were discarded:
2: previous death
8: management
by oral route





CONCLUSIONS

The standardization of drug solutions containing morphine, haloperidol, midazolam or fentanyl permits the establishment of a rational program to ensure safe and quality end-of-life home care in paediatric palliative patients.







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