# 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-of-life home care setting because **portable infusion pumps are well tolerated** and maintain more nearly **constant drug plasma levels**.

# 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.

# **METHODS**

Identification:
Most commonly used drugs
Usual administration routes

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.

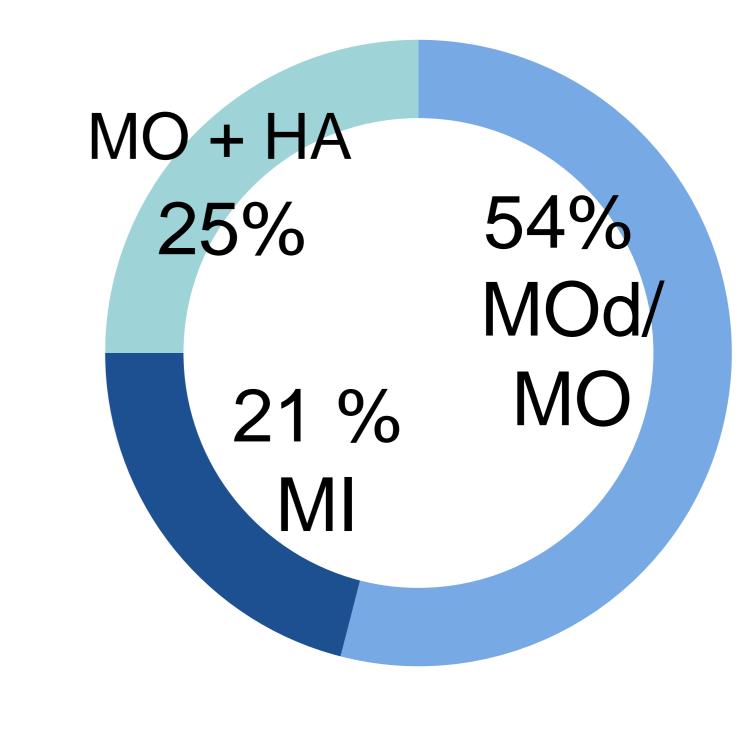
# 22 drug solutions

•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.









