

## P03: Palliative Care - Pain

Jennie Helmer

Updated: September 29, 2023

Reviewed: September 29, 2023

### Introduction

Pain is a common palliative or end-of-life complaint in patients seeking treatment in the out-of-hospital environment. It can be well controlled in up to 90% of patients using standard therapies, but remains under-recognized and under-treated in many palliative scenarios.

The objective of care is to reduce suffering associated with the experience of pain and to improve patient comfort. The adequacy of analgesia may be assessed through a variety of mechanisms, including physiological signs of pain, verbal numerical ratings, and overall appearance (whether distressed or not). Frequent reassessment and repeat administrations of medication are essential components of pain management.

### Essentials

- Establish goals of care in consultation and conversation with the patient, family, and care team.
- The total daily dose is the 24-hour total of a specific drug that is taken for regular and breakthrough pain.
- Breakthrough pain is a transient exacerbation of pain against a background of relatively stable and adequately controlled pain.
- The breakthrough or rescue dose is an additional dose of medication used to control breakthrough pain. It does not replace or delay the next routinely scheduled dose. Breakthrough doses of pain medication are generally 10% of the total regular daily opioid dose.
- Paramedics and EMRs should consider referring patients with pain emergencies to acute hospital care for treatment of the underlying cause. Pain emergencies include fractures, spinal cord compression, superior vena cava obstruction, and an obstructed or perforated viscus.

### Additional Treatment Information

- Treatment of pain is guided by use of the 0-10 pain intensity scale.
- The dose of subcutaneous morphine to be administered can be calculated by converting each of the patient's regular opioid analgesics to a total equivalent daily dose of oral morphine.
  - Where the total equivalent daily dose of oral morphine is < 50 mg, the patient should receive morphine 2.5 mg subcutaneously
  - Where the total equivalent daily dose of morphine of oral morphine is > 50 mg, 10% of that dose will be calculated and converted to a subcutaneous dose
  - Calculated doses of morphine > 10 mg should be discussed with the clinician
  - The maximum subcutaneous dose of morphine is 20 mg; consult Clinical and/or convey to hospital for patients who do not respond to this dose (1-833-829-4099)
- Breakthrough Dosing Principles:
  - Breakthrough doses are generally 10% of the total regular daily opioid dose
  - Use immediate release opioids every hour orally or every 30 minutes subcutaneously PRN
  - Use of the same opioid for breakthrough pain doses and the regularly scheduled opioid improves the ease and clarity for determining future dose titrations
  - Reassess when 3 or more breakthrough doses are used per 24 hours (see titration section)
- Titration Principles:
  - Calculate total daily dose (TDD) for the past 24 hours
    - $TDD = \text{Regular dose} + \text{all breakthrough doses (BTD)}$
- Regular dose every 4 hours for the next 24 hours = past TDD/6
- Breakthrough dose (BTD) = new regular dose X 10%. Increase the opioid proportionally whenever the regular dose is increased.

## Referral Information

All palliative and end-of-life patients can be considered for inclusion in the [Palliative Care Clinical Pathway](#) (treat and refer) approach to care. Paramedics must complete required training prior to applying this pathway. EMRs are required to contact CliniCall for consultation to proceed with the ASTaR clinical pathway.

## Interventions

### First Responder

- Provide reassurance
- Promote non-pharmacological pain strategies such as positioning and reassurance

### Emergency Medical Responder – All FR interventions, plus:

- Establish goals of care in consultation and conversation with the patient, family, and care team
- Complete a comprehensive pain assessment
  - For those unable to communicate verbally, assess for restlessness, rigidity, grimacing, and distressed vocalizations
- Consider [nitrous oxide](#)
  - Provision of short-term pain relief should be in conjunction with planning for longer-term pain management

### Primary Care Paramedic – All FR and EMR interventions, plus:

- Assist family with the administration of any medications that are recommended as part of an established care plan
- Paramedics can only administer the patient's own medications where the symptom management plan is clear, they are trained and experienced in the technique of administration, and are operating within BCEHS scope
- [CliniCall consultation required](#) prior to initiating treatment.
- Consider [acetaminophen](#) (patient pain rating of 1 to 6/10)
- **Requires completion of PCP scope expansion education:**
  - For severe (7/10 to 10/10) pain
    - [MORPHine](#) SC
    - [HYDRORmorphone](#) SC

### Advanced Care Paramedic – All FR, EMR, and PCP interventions, plus:

- For severe (7/10 to 10/10) pain:
  - First line:
    - [Oxycodone](#) PO
  - Second line:
    - [KetAMINE](#) SC or IN
- Consider the patient's usual opioid regimen and whether opioid naïve
- The patient's own prescribed pain medication may be administered if the ACP has completed the appropriate Schedule 2 (4(b)) license endorsement
- [CliniCall consultation required](#) prior to the administration of any out-of-scope medications.

## Evidence Based Practice

Analgesia

### Supportive

- [Fentanyl](#)
- [Morphine](#)

- [Hydromorphone](#)
- [Oxycodone](#)
- [Topical Narcotic](#)

#### Neutral

- [Acetaminophen](#)
- [Corticosteroids](#)

#### Against

## References

1. Alberta Health Services. AHS Medical Control Protocols. 2020. [[Link](#)]
2. Ambulance Victoria. Clinical Practice Guidelines: Ambulance and MICA Paramedics. 2018. [[Link](#)]
3. BC Centre for Palliative Care. B.C. Inter-Professional Palliative Symptom Management Guidelines. 2017. [[Link](#)]
4. Nova Scotia Health Authority. Nova Scotia Palliative Care Competency Framework. 2017. [[Link](#)]
5. Pallium Canada. Learning Essentials Approach to Palliative Care. 2019. [[Link](#)]
6. Pre-Hospital Emergency Care Council. Palliative Care by PHECC registered practitioners. 2016. [[Link](#)]
7. University of Colorado Denver. Delirium & RASS. 2002. [[Link](#)]

## Practice Updates

- 2023-09-29: updated PCP interventions
- 2022-01-06: EMRs now authorized to access ASTaR clinical pathway.

