P04: Palliative Care - Dyspnea

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Introduction

Dyspnea is the uncomfortable feeling of being short of breath. By definition, it is a subjective sensation, and may or may not be associated with hypoxia. The prevalence of dyspnea in palliative patients is high, and the intensity of the sensation tends to worsen towards the end of life. Opioids are the first-line pharmacological therapy, but several other, non-medication-based therapies exist.

Essentials

- Establish goals of care in consultation and conversation with the patient, family, and care team.
- Dyspnea may not necessarily be due to hypoxia. Improving airflow to the patient with fans can sometimes be as effective as oxygen administration. Paramedics should focus on relaxation and other non-pharmacological techniques before escalating to medications.
- Sit the patient upright, avoiding compression of the chest and abdomen. Consider positions that allow optimal lung expansion. If the patient cannot tolerate sitting upright, positioning with the affected (i.e., poorly ventilating) lung down may relieve the sensation of breathlessness.
- In cancer patients who are dyspneic, consider opioids as a first-line agent.
- Oxygen is generally only required in hypoxic patients.

Additional Treatment Information

- Subcutaneous morphine can be given to alleviate the sensation of dyspnea.
  - The dose of subcutaneous morphine is calculated by converting each of the patient's regular opioid analgesics to a total equivalent daily dose of morphine. (See https://ipalapp.com/manage/dyspnea/ for additional information on equianalgesic calculations.)
  - If the patient is not prescribed morphine, begin with 2.5 mg SC.
  - Where the total equivalent daily dose of morphine is over 50 mg, 10% of the dose can be converted to and given as a subcutaneous dose. The maximum subcutaneous dose of morphine is 20 mg. Consultation should be sought in cases where patients do not experience relief from these doses, and transport should be considered.
  - Calculated doses of morphine in excess of 10 mg should be discussed with a clinician, either as part of the palliative care team or through CliniCall.
  - If the patient is unable to have morphine, an equivalent does of fentanyl should be administered. (As an example, 2.5 mg of morphine is equivalent to 25 mcg of fentanyl; 20 mg of morphine is equivalent to 200 mcg of fentanyl.)

Referral Information

All palliative and end-of-life patients can be considered for inclusion in the Palliative Clinical Pathway (treat and refer) approach to care. Paramedics must complete required training prior to applying this pathway.

Interventions

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 dyspnea assessment.
- Provide supplemental oxygen in cases where SpO2 ≤ 94%, or differ significantly from patient's normal oxygen

saturation.

- Apply other methods to provide fresh air when SpO2 measurements do not indicate hypoxia. Fans, windows, and improved airflow should be attempted for at least five minutes.
- Promote non-pharmacological pain management strategies such as repositioning to more upright postures, relaxation, and reassurance.

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

- Assist family with administration of any medications that are part of the patient's care plan. Paramedics shall only administer patient medications where the symptom management plan is clear, and practitioners are properly trained, and the intervention is within the scope of practice. Contact CliniCall for consultation.
- Consider salbutamol via nebulizer for suspected bronchospasm.

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

- In moderate to severe dyspnea:
  - Consider ipratropium via nebulizer
  - Consider mORPHine SC
  - Consider MIDAZOLam SC for anxiety
- Titrate opioid dose incrementally by 25% according to effectiveness and PRN usage in prior 24 hours. Goal is patient comfort.

Evidence Based Practice

Breathlessness

References

1. Alberta Health Services. AHS Medical Control Protocols. 2020. [Link]
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4. Nova Scotia Health Authority. Nova Scotia Palliative Care Competency Framework. 2017. [Link]
5. Pallium Canada. Learning Essentials Approach to Palliative Care. 2019. [Link]
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