Institut national d'excellence en santé et en services sociaux
Québec

QUEBEC'S NATIONAL MEDICAL PROTOCOL

No. 888018

Pharmacological treatment of nausea in a person receiving palliative care

Developed in collaboration with an advisory committee consisting of Québec clinicians and experts

Validated by the Comité d'excellence clinique - Usage optimal du médicament (incluant les protocoles médicaux nationaux et les ordonnances associées) of the Institut national d'excellence en santé et en services sociaux (INESSS)

CLINICAL SITUATION OR TARGET POPULATION

A person 18 years of age or older with nausea, with or without vomiting, who is receiving Level D palliative care[1] aimed solely at providing comfort.

CONTRAINDICATIONS TO THE APPLICATION OF THIS PROTOCOL

- Contraindications to the use of all the recommended medications.

INSTRUCTIONS

1. ASSESSMENT OF HEALTH STATUS

1.1 Signs and symptoms

Look for:

- Nausea with or without vomiting

1.2 Medication history

Inquire about:

- The regular use of dimenhydrinate, haloperidol, metoclopramide or prochlorperazine.
- Any contraindications to the use of the medications for nausea recommended in Section 2.2.

2. TREATMENT APPROACH

2.1 Therapeutic objective

To relieve the feeling of discomfort associated with nausea with or without vomiting.

[1] *The determination of the level of care is the physician's responsibility and is based on a thorough, individualized assessment of the patient's current medical status and of the expressed prognosis in terms of morbidity and reversibility, on the one hand, and of the impact on quality of life and autonomy as assessed by the patient, on the other.* [Institut national d'excellence en santé et en services sociaux (INESSS). Les niveaux de soins : normes et standards de qualité. Guide written by Michel Rossignol and Lucy Boothroyd. Québec, Qc:INESSS; 47 p.]

2.2 General information regarding pharmacological treatments for nausea

The following general information on pharmacological treatments for nausea is not exhaustive.

HALOPERIDOL[1]	
Contraindications	▶ History of allergic reaction or intolerance to haloperidol ▶ Parkinson's disease and other parkinsonian syndromes – Lewy body neurocognitive disorder, progressive supranuclear paralysis, multisystem atrophy, corticobasal degeneration ▶ Epilepsy or uncontrolled convulsions
Precautions	▶ Neurocognitive disorder
Dosage	▶ 0.5 to 1 mg PO or SC every 4 hours as needed for 48 hours ▶ Maximum dose: 4 mg/day
Administration details	▶ Intravenous administration is usually contraindicated (haloperidol decanoate should not be administered intravenously) ▶ The oral concentrate can be mixed with water or juice but not tea or coffee.
Drug adverse effects	▶ Anticholinergic effects: dry mouth, constipation, urinary retention ▶ Orthostatic hypotension: risk of fall ▶ Drowsiness and sedation ▶ Extrapyramidal symptoms: akathisia, parkinsonism, agitation
Most significant drug interactions	▶ Dopaminergic agonists: ↓ efficacy ▶ Central nervous system depressants (alcohol, anxiolytics, opioids, sedatives): ↑ sedative effect. Monitor the patient for signs of excessive sedation. ▶ Lithium: neurotoxic

1. Not approved by Health Canada for the treatment of nausea.

DIMENHYDRINATE	
Contraindications	▶ History of allergic reaction or intolerance to dimenhydrinate, diphenhydramine or 8-chlorotheophylline.
Precautions	▶ Neurocognitive disorder: May cause or exacerbate delirium
Dosage	▶ 25 mg to 50 mg PO, SC or IR every 4 hours as needed for 48 hours ▶ Maximum dose: 400 mg/day
Administration details	▶ None
Drug adverse effects	▶ Agitation ▶ Confusion, delirium ▶ Anticholinergic effects: dry mouth, constipation, urinary retention ▶ Drowsiness, sedation, dizziness ▶ Restless leg syndrome
Most significant drug interactions	▶ Anticholinergics (including tricyclic antidepressants, monoamine oxidase inhibitors and antihistamines) ▶ Central nervous system depressants (alcohol, anxiolytics, opioids, sedatives) : ↑ sedative effect. Monitor the person for signs of excessive sedation.

2.3 Choosing the pharmacological treatment

Favour oral administration.

CHOOSING PHARMACOLOGICAL TREATMENT FOR NAUSEA		
Treatments in order of preference:	**Dosage and dosage adjustment details**	**Vomiting within 30 minutes after the oral administration of haloperidol or dimenhydrinate**
1st choice: Haloperidol	Administer 0.5 mg of haloperidol PO or SC. • If effective, continue administering haloperidol as needed every 4 hours. • If ineffective after 1 hour, boost the dose with 0.5 mg of haloperidol PO or SC and then, if effective, continue by administering 1 mg of haloperidol PO or SC every 4 hours as needed for 48 hours (maximum four 1-mg doses daily). • If the 1-mg dose of haloperidol is ineffective, stop the protocol. Further investigation is required.	Administer one replacement dose PO. • A replacement dose can be given once.
2nd choice: Dimenhydrinate • Contraindication to administering haloperidol (see Section 2.2.) • Patient currently treated with haloperidol, metoclopramide or prochlorperazine	Administer 25 mg of dimenhydrinate PO, SC or IR. • If effective, continue administering dimenhydrinate every 4 hours as needed for 48 hours. • If ineffective after 1 hour, boost the dose with 25 mg of dimenhydrinate PO, SC or IR and then, if effective, continue by administering 50 mg of dimenhydrinate every 4 hours as needed for 48 hours. • If the 50-mg dose of dimenhydrinate is ineffective, stop the protocol. Further investigation is required.	

3. INFORMATION TO BE PROVIDED

Discuss the nonpharmacological methods for reducing nausea

LIFESTYLE	DIETARY	ENVIRONMENTAL
▶ Maintain good oral hygiene (especially after vomiting) ▶ Avoid rapid movements of the head if the nausea is associated with position changes ▶ Recommend rest	▶ Opt for feeding and hydration in small amounts based on the person's preferences and tolerance ▶ Consume liquids and solid foods separately ▶ After an episode of vomiting, wait 30 to 60 minutes before gradually resuming liquids ▶ Avoid lying down for at least 30 to 60 minutes after eating	▶ Avoid strong or unpleasant smells ▶ Favour a calm and well-ventilated environment

For persons receiving palliative care at home:

Explain to the person or their caregiver how to use the medications that are not administered orally.

4. FOLLOW-UP

Evaluate the effectiveness and identify the adverse effects of the pharmacological treatment for nausea (see Section 2.2) at least once a day.

5. SITUATIONS REQUIRING FURTHER INVESTIGATION OR REASSESSMENT

- Vomiting that occurs within 30 minutes of taking oral medications other than haloperidol or dimenhydrinate, to assess the need to provide replacement doses.
- Vomiting of the replacement dose of haloperidol or dimenhydrinate within 30 minutes of taking this second dose orally.
- Nausea persists after a dose adjustment.
- Suspicion of bowel obstruction: vomiting with colic or fecaloid vomiting, or severe abdominal pain.
- Suspicion of intracranial hypertension: projectile vomiting, headache or convulsions with new neurological symptoms (e.g., muscle weakness, lack of coordination, visual disturbances, or others).
- A reassessment is necessary when nausea persists for more than 48 hours after the start of pharmacological treatment.

REFERENCES

This protocol is based on the latest scientific data and best practice recommendations, which were enhanced with contextual information and the perspectives of Québec clinicians and experts. For further details on the process used to develop this medical protocol and to consult the references, see the report in support of this protocol.