

Symptom Management Pocket Guides:

NAUSEA & VOMITING

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Assessment

- Comprehensive assessment includes: interview, physical assessment, nutrition assessment, medication review, medical and surgical review, psychosocial and physical environment review and appropriate diagnostics.

Diagnosis

- Nausea and vomiting is common and has multiple etiologies, several of which may be present at the same time, hence identifying the underlying causes is essential.

Non-Pharmacological Treatments

- **Providing information and education is recommended as it is fundamental to enhance the patient and family's ability to cope.**
- Consult with the inter-professional team members (e.g., social worker, spiritual practitioner, physiotherapist, occupational therapist, counselor for psychosocial care and anxiety reduction).
- Explain to the patient/family what is understood about the multiple triggers of nausea and/or vomiting and that it may take a number of strategies to make a difference

Consult with a Clinical Dietitian and have them provide dietary/nutritional advice

- Limit spicy, fatty and excessively salty or sweet foods, foods with strong odours and foods not well tolerated.
- Use small, frequent, bland meals and snacks throughout the day. Suggest small amounts of food every few hours. (Hunger can make feelings of nausea stronger).
- Hard candies, such as peppermints or lemon drops may be helpful.
- Sip water and other fluids (fruit juice, flat pop, sports drinks, broth and herbal teas such as ginger tea) and suck on ice chips, popsicles or frozen fruit. It is important to try and drink fluids throughout the day even when not feeling thirsty.
- Limit the use of caffeine, including colas and other caffeinated soft drinks, such as coffee drinks, and tea (both hot and cold).

- Reduce meal size when gastric distension is a factor.
- Ingest liquids and solids separately. It is often helpful to drink fluids after and/or in between meals.
- Consume food/liquids cold or at room temperature to decrease odours.
- Sit upright or recline with head elevated for 30-60 minutes after meals.
- If vomiting, limit all food and drink until vomiting stops; wait for 30-60 minutes after vomiting, then initiate sips of clear fluid.
- When clear fluids are tolerated, add dry starchy foods (crackers, dry toast, dry cereal, pretzels)
- When starchy foods are tolerated, increase diet to include protein rich foods (eggs, chicken, fish) and lastly incorporate dairy products into the diet.

Environmental modification (where possible)

- Eliminate strong smells and sights.
- Optimize oral hygiene, especially after episodes of vomiting. Rinse with ½ tsp baking soda, ½ tsp salt in 2 cups water.
- Try rinsing mouth before eating to remove thick oral mucus and help clean and moisten mouth.
- Wear loose clothing.
- If possible try to create a peaceful eating place with a relaxed, calm atmosphere. A well ventilated room may also be helpful.

Complementary Therapies

- Acupuncture or acupressure points.
- Visualization, hypnosis, distraction.

Pharmacological Treatments

- Selection of antiemetics should be based on the most likely etiology of nausea and vomiting and site of action of medication.
- Any unnecessary medications that may be contributing to nausea and vomiting should be discontinued.
- Constipation may be a factor contributing to nausea and vomiting and requires treatment.
- It is necessary to rule out bowel obstruction and if present, appropriate treatment should be undertaken.

Choosing an antiemetic

- Metoclopramide is recommended as the drug of first choice to control chronic nausea/vomiting in patients with advanced cancer.
- Titrate metoclopramide to maximum benefit and tolerance. If not effective add/switch to another dopamine antagonist (e.g. haloperidol).
- Domperidone may be substituted for patients who can swallow medications and who have difficulties with extrapyramidal reactions.
- Titrate antiemetics to their full dose, unless patient develops undesirable effects, before adding another drug.
- If nausea is not controlled with a specific antiemetic within 48h, add another antiemetic from another group, but do not stop the initial agent.
- Consider combinations but monitor overlapping toxicities.
- Use regular dosing of antiemetics if experiencing constant nausea and/or vomiting.

- **For persistent nausea and/or vomiting antiemetics should be prescribed on a regular dosing schedule with a breakthrough dose available.**
- All medications need to be individually titrated to the smallest effective dose or until undesirable side effects occur.

Treatment and Management

1. Treat the cause, if possible.
2. Symptomatic management:
 - Fluid and electrolyte replacement as appropriate.
 - Nutritional advice – consider making patient NPO if obstructed or until emesis has resolved for several hours; if not obstructed, change diet as appropriate, depending on the cause of nausea.
 - Treat gastrointestinal obstruction (may need to consider interventions such as nasogastric tube (NGT), venting gastrostomy tube (PEG), stents, ostomies, possible surgical resection).
 - Pharmacological treatment of symptoms.

Pharmacological Treatment of Symptoms: Step 1

The choice of antiemetic depends on the cause and the receptors and neurotransmitters involved:

- **For delayed gastric emptying or abdominal causes (excluding bowel obstruction, see above):**
 - Metoclopramide 5-20 mg po/subcut/IV q6h (or tid AC meals plus qhs); may be used q4h if needed; 40-100 mg/24 h subcut/IV continuous infusion.
 - Alternative (if metoclopramide is not well tolerated): domperidone 5-20 mg po q6h (or tid AC meals plus qhs); causes less extrapyramidal side effects than metoclopramide.
- **For patients treated with palliative radiotherapy:**
 - For symptoms that occur within 24 hours of administration of radiotherapy: ondansetron 8 mg po/subcut/IV q8 – 24h; granisetron 1 mg po q12h or 1 mg IV once daily
 - For anticipatory nausea or vomiting: lorazepam 1-2 mg po/sl/IV/subcut
 - The above agents are also best given prior to radiation for optimal effect.
- **For opioid-induced nausea:**
 - Metoclopramide 10-20 mg po/subcut/IV q6h
 - Alternative: haloperidol 0.5-2.5 mg po/subcut q12h

- **For other chemical/metabolic causes:**
 - Haloperidol 0.5-2.5 mg po/subcut q12h
 - Alternative: metoclopramide 10-20 mg po/subcut/IV q6h

- **For brain metastases:**
 - Dexamethasone 4-8 mg po/subcut/IV bid (0800 and 1300 h); for brain metastases that do not respond to dexamethasone or for leptomeningeal carcinomatosis:
 - Haloperidol 1-2 mg po/subcut q12h

- **For vestibular causes:**
 - Scopolamine (transdermal patch) one or two 1.5 mg patches q72h
 - Alternate: Dimenhydrinate 25-50 mg po/subcut/IV q4h

- **If psychogenic factors play a role:**
 - Oxazepam 10 mg po tid or lorazepam 1-2 mg po/sl/subcut/IV tid
 - Psychological techniques (particularly for chemotherapy-induced nausea and vomiting)

Pharmacological Treatment of Symptoms: Step 2

A combination of different antiemetics is required in approximately 30% of cases. Combination therapy is only beneficial if different neurotransmitters are targeted.

If the response to monotherapy is inadequate, the following combinations may be considered:

- Metoclopramide po/subcut/IV + dexamethasone po/subcut/IV.
- Haloperidol po/subcut + dexamethasone po/subcut/IV.

Pharmacological Treatment of Symptoms: Step 3

If dexamethasone combined with either metoclopramide or haloperidol yields insufficient results, the following approaches may be considered:

- Serotonin (5HT₃) antagonists (ondansetron 4 - 8 mg po/subcut/IV q8-12h; granisetron 1 mg po q12h/1mg IV once daily; or dolasetron 100 mg po/IV once daily); in principle, combine with dexamethasone 4 mg po/subcut/IV once daily.
Disadvantages of the serotonin antagonists: high costs; side effects include constipation, headaches.
- Methotrimeprazine monotherapy using a starting dose of 5 – 10 mg po q8h prn or 6.25-12.5 mg subcut q8h prn. Increase as needed to maximum of 25 mg per dose.
- Olanzapine monotherapy 2.5 – 5 mg po/sl/subcut once daily or bid.

Diphenhydramine may be used for the treatment of akathesias secondary to increased doses of metoclopramide.

Edmonton Symptom Assessment Scale (ESAS)

Edmonton Symptom Assessment System (ESAS)

Please circle the number that best describes:

No pain 0 1 2 3 4 5 6 7 8 9 10 Worst possible pain

Not tired 0 1 2 3 4 5 6 7 8 9 10 Worst possible tiredness

Not nauseated 0 1 2 3 4 5 6 7 8 9 10 Worst possible nausea

Not depressed 0 1 2 3 4 5 6 7 8 9 10 Worst possible depression

Not anxious 0 1 2 3 4 5 6 7 8 9 10 Worst possible anxiety

Not drowsy 0 1 2 3 4 5 6 7 8 9 10 Worst possible drowsiness

Best appetite 0 1 2 3 4 5 6 7 8 9 10 Worst possible appetite

Best feeling of wellbeing 0 1 2 3 4 5 6 7 8 9 10 Worst possible feeling of wellbeing

No shortness of breath 0 1 2 3 4 5 6 7 8 9 10 Worst possible shortness of breath

Other problem 0 1 2 3 4 5 6 7 8 9 10

Patient's Name _____

Date _____ Time _____

Complete by (check one)

Patient

Caregiver

Caregiver assisted

BODY DIAGRAM ON REVERSE SIDE

August, 2006

Used with permission from the Regional Palliative Care Program, Capital Health, Edmonton, Alberta, 2006

Selected References:

- 1) Cancer Care Nova Scotia. Guidelines for the Management of Nausea and Vomiting In Cancer Patients, Jan 2004.
- 2) Fraser Health. Hospice Palliative Care Program Symptom Guidelines. Fraser Health, 2006.
- 3) Editorial Board Palliative Care: Practice Guidelines. Nausea and vomiting. Utrecht, The Netherlands: Association of Comprehensive Cancer Centres (ACCC), National Guideline Clearinghouse, 2006.
- 4) National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology: Palliative Care. National Comprehensive Cancer Network Website, (2008). Available from http://www.nccn.org/professionals/physician_gls/PDF/palliative.pdf

For full references and more information please refer to [CCO's Symptom Management Guide-to-Practice: Nausea & Vomiting](#) document.

Disclaimer:

Care has been taken by Cancer Care Ontario's Symptom Management Group in the preparation of the information contained in this pocket guide.

Nonetheless, any person seeking to apply or consult the pocket guide is expected to use independent clinical judgment and skills in the context of individual clinical circumstances or seek out the supervision of a qualified specialist clinician.

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