Management of Nausea and Vomiting

Nausea and Vomiting is one of the most distressing symptoms at end of life. Nausea occurs more often than vomiting and affects quality of life, function, intake and metabolic processes. Nausea and vomiting can be controlled in most patients.

Causes
Nausea and Vomiting are caused by many different factors. Identify and treat the cause to relieve the symptom.

- Medications or toxins in the bloodstream
  - Side effects (opioids)
  - High blood levels of certain medication (digoxin toxicity)
  - Cytotoxic chemotherapy
- Radiation treatment
- Slowed GI motility
- Peptic ulcer disease
- Constipation, Impaction, obstruction
- Organomegaly (enlarged liver, spleen, pancreas)
- Esophageal stricture or obstruction
- Pharyngeal irritation (coughing, secretions, candida)
- Vestibular stimulation, vertigo, motion sickness
- Increased intracranial pressure
- Pain
- Electrolyte disturbances (hypercalcemia)
- Certain types of cancer
- Virus/infection
- Anxiety

Assessment

History
- Diagnosis and treatments (colon cancer, radiation to abdomen)
- Prior history (peptic ulcer disease, vestibular disease)
- Current medications (opioids, chemotherapy)
- Last bowel movement
- Current dietary and fluid intake and food tolerance
- Associated symptoms (cramping, diarrhea, fever)
Pattern and Timing
● After meals?
● After medication, initiation or increase in medication
● On movement?
● Associated with anxiety or treatment?

Other Symptoms
● Heartburn, epigastric distress or pain
● Hiccups
● Dysuria
● Constipation, impaction
● Difficulty or pain swallowing
● Cough, excessive, respiratory secretions
● Anxiety, fear, spiritual distress

Physical Examination
● General appearance and self report
● Oral exam: presence of candida, thrush, lesions, bleeding
● Abdominal exam: distention, rigidity, bowel sounds, ascites, tenderness
● Skin: Signs of dehydration, infection
● Elimination: signs of bladder or renal infection, presence of impaction
● Pulmonary: cough, gagging, infection, tenacious sputum, blood
● Review of laboratory electrolyte values

Non-Pharmacological Interventions
● Stop offending agent if possible (medication, treatment, dietary)
● Take most medications after eating (except anti-emetics)
● Evaluate need to change medication, dosage, route or agent
● Avoid stimulating agents (caffeine, lactose, spicy food, high fiber or high fat)
● Clear liquids and electrolyte products (Gator-ade®, Pedialyte®, broth, ginger ale, jello)
● Offer small frequent meals, cold foods often tolerated better
● Ice chips only for severe vomiting
● Provide frequent oral care
● Protect from aspiration, elevate head of bed for 2 hours after eating
● Reduce noxious stimuli (odors, pain)
● Apply cool, damp cloth to back of neck, forehead
● Cool, quiet environment, reduce anxiety, encourage deep breathing, relaxation
Pharmacological Interventions for Nausea and Vomiting

Pharmacological treatment should be based on relieving the cause of nausea/vomiting whenever possible. Resolution of underlying factor(s) should be primary goal whenever possible. Utilize team collaboration in assessment, intervention and education with patient and family.

For N/V from vestibular stimulation, motion sickness or excessive pulmonary secretions
- Scopolamine 1.5 mg patch – change q 3 days or
- Diphenhydramine (Benadryl®) 25 mg q 6 hours po prn or
- Hyoscyamine (Levsin®) 0.125 -0.25 mg q 6 hours po/sl prn

For N/V from visceral or GI tract stimulation:
- Metoclopramide (Reglan®) 10-30 mg QID po
- Add diphendramine (Benadryl®) 25 mg q 6 hs if ≥ 40 mg/day
- Hyoscyamine (Levsin®) 0.125 -0.25 mg q 6 hours po/sl prn
- Meclizine (Antivert®) 12.5 – 25 mg BID – TID po

If no relief then consider:
- ABR transdermal gel 1-2 ml q 6 hours prn
- Dexamethasone (Decadron®) 4 -12 mg po/IV 2-4 times daily

For N/V from increased intracranial pressure:
- Dexamethasone (Decadron®) 4 -12 mg po/IV 2-4 times daily
- Haloperidol (Haldol®) 0.5 – 2 mg q 6 hours or 1-3 mg q hs po/sl

For N/V stimulated by toxins or medications in the blood stream, choose one:
- Prochlorperazine (Compazine®) 10 mg q 6-8 h po or
- 25 mg suppository q 8-12 h pr prn
- Haloperidol (Haldol®) 0.5 – 2 mg q 6 hours or 1-3 mg q hs po/sl
- Metoclopramide (Reglan®) 10-30 mg QID po.
- Add diphendramine (Benadryl®) 25 mg q 6 hs if ≥ 40 mg/day

For N/V stimulated by anxiety, sights, smells:
- Lorazepam (Ativan®) 0.5-2 mg q 6 h po or sl prn
- Diphendramine (Benadryl®) 25 mg q 6 prn
Refractory nausea and vomiting may require a combination of medications which utilize different mechanisms of action.

Evaluate and document symptom at each visit until resolved. Evaluate discontinuation of medications as symptoms resolve.

Collaborate with psychosocial and spiritual care professionals to confirm that symptoms are managed with the most effective combination of pharmacological and non pharmacological interventions.

**References:**

*Clinical Practice Guidelines: The Hospice of the Florida Suncoast (2008).*


