

# Vomiting and/or nausea

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#### Rationale

Nausea may occur alone, or along with vomiting, dyspepsia, and other gastrointestinal complaints. When prolonged or severe, vomiting may be associated with disturbances of water and electrolyte balance that may require correction prior to other specific treatment.

#### **Causal Conditions**

(list not exhaustive)

- Gastrointestinal system
  - a. Esophagus/Stomach/Duodenum (e.g., obstruction, gastroenteritis, reflux, gastroparesis, peptic ulcer disease)
  - b. Small bowel/Colon (e.g., acute infectious enteritis, obstruction, inflammatory bowel disease, neoplasm)
  - c. Hepato-biliary disease or pancreatic disease (e.g., acute hepatitis / pancreatitis / cholecystitis)
  - d. Peritoneal irritation (e.g., appendicitis)
- Central nervous system
  - a. Increased intracranial pressure (e.g., infection, trauma, tumour)
  - b. Vestibular nerve lesions
  - c. Brain stem lesions
  - d. Psychiatric/Psychological conditions
- Other
  - a. Endocrine and/or metabolic (e.g., diabetes, hypercalcemia, pregnancy)

- b. Cancer
- c. Sepsis (e.g., pyelonephritis, pneumonia)
- d. Drugs and toxins (e.g., chemotherapy, food poisoning)
- e. Miscellaneous (e.g., acute myocardial infarction, uremia)

## **Key Objectives**

Given a patient with vomiting and/or nausea, the candidate will diagnose the cause, severity, and complications, and will initiate an appropriate management plan. In particular, candidates should recognize that important causes of nausea and vomiting (e.g., raised intracranial pressure, metabolic conditions, myocardial infarction) arise outside of the gastrointestinal system.

### **Enabling Objectives**

Given a patient with nausea and/or vomiting, the candidate will

- list and interpret critical clinical findings, including
  - a. obtain a history for non-gastrointestinal causes (e.g., medication history, neurological disease, cardiac ischemia, metabolic conditions);
  - b. obtain a complete review of gastrointestinal symptoms;
  - c. physical examination targeting the gastrointestinal system, and salient findings in other systems suggesting need for urgent intervention (e.g., papilledema, volume status);
- list and interpret critical investigations to delineate both causes and effects
  - a. serum electrolytes, creatinine, calcium, glucose, cortisol;
  - b. more targeted investigations (e.g., head imaging, cosyntropin stimulation test), if indicated;
  - c. more specialized gastrointestinal testing, if indicated;
- construct an effective initial management plan, including
  - a. outline management plan targeting condition identified as causative, understanding that in some patients no cause will be found;
  - b. recommend the appropriate use of commonly used anti-nausea/anti-emetic medications.