NAUSEA

Nausea is an unpleasant sensation that often precedes vomiting. Nausea frequently is relieved by vomiting and may be accompanied by increased parasympathetic nervous system activity, including diaphoresis, salivation, bradycardia, pallor, and decreased respiratory rate.[1]

Vomiting, or emesis, is the forceful retrograde expulsion of gastric contents from the body.[1]

Individuals with COVID-19 have experienced nausea.[2]

Nursing Assessment:

- Clinical assessment: Complete a comprehensive nursing history and careful physical exam, including history of symptoms (onset, pattern, triggers, associated symptoms [heartburn, dysphagia, constipation, and dizziness], precipitating and relieving events, and response to medications), psychosocial history, medication history, and results of laboratory/diagnostic tests.[3]
  - A patient's self-report should be used whenever possible for the assessment of nausea (subjective), whereas vomiting can be observed and measured.[5]
  - A visual analog scale (VAS) to quantify the severity of subjective symptoms may be used when a patient's self-report is not feasible.[3]
  - Other reliable tools to measure nausea and vomiting are the Morrow Assessment of Nausea and Emesis, Rhodes Index of Nausea and Vomiting Form 2, and Functional Living Index Emesis.[3]

Nonpharmacological Management:

- Discuss the symptom with the patient and family if able, with particular focus on how nausea and vomiting are affecting the patient's ability to function, quality of life, and burden on the caregiver, if appropriate.[5]
- Self-management techniques: Educate the patient and family about dietary modifications (e.g., smaller, bland meals).[3,8]
- Integrative therapies such as relaxation, meditation, imagery, distraction, and deep breathing might help.[3,8]

Pharmacological Management*:

- Optimize treatments for the underlying etiology.
- Medications to treat nausea and vomiting should be selected based on perceived etiology, pathophysiology, severity, and treatment setting.
  - Consider metoclopramide 10 mg (by mouth, intravenously, or subcutaneously) every six hours.[8]
    - This is often favored as first-line treatment. Scheduling regular doses can help to prevent nausea.[3]
    - There is a risk of extrapyramidal side effects with prolonged use. It is contraindicated with bowel obstructions or gastrointestinal hemorrhage or perforation.[3,8]

- Monitor for QT prolongation.[8]
- Reduce doses with older patients and those who are renally impaired.[3]

- Consider ondansetron 4 mg by mouth or intravenously every eight hours as needed.[8]
  - Monitor for headache, fatigue, constipation, diarrhea, and QT prolongation.[8]
- If the initial approach is unsuccessful, consider adding or changing medication classes.[8]
- Avoid using two medications from the same class due to side effects and toxicities.[8]
- Further evaluation may be needed and treatment plan may require adjustments for nausea related to anxiety, constipation, medications, electrolyte imbalances, etc.

Additional Interventions:

- An interprofessional team with multiple perspectives can provide successful interventions for patients with nausea.
- Consider referral to palliative care for advanced symptom management.

Patient and Family Education:

- Clarify patient and family goals frequently during course of illness.
- Provide education on underlying etiology of nausea, treatment options, medications, and anticipated effects.
- Set realistic expectations for symptom trajectory, with reassuring education on management strategies.
- Instruct on appropriate nonpharmacological strategies and safety, including eating slowly; minimizing sights, sounds, and smells that initiate nausea; and practicing deep breathing and relaxation.

***DISCLAIMER:** Medication dosing for symptom management is only a recommendation for nursing to discuss with prescribers and for prescriber consideration after careful history, physical exam, and review of laboratory/diagnostic studies. Dosing should be adjusted based on each patient's clinical case, presentation, and prescriber's clinical judgment.

There are no drugs approved by the U.S. Food and Drug Administration (FDA) specifically for the treatment of patients with COVID-19. At present, clinical management includes infection prevention, control measures, and supportive care, including supplementary oxygen and mechanical ventilatory support when indicated. The Centers for Disease Control and Prevention also hypothesizes that angiotensin converting enzyme (ACE) inhibitors, angiotensin II receptor blockers (ARBs), and steroids may increase the severity of COVID-19. However, currently, there are no data to suggest a link between those medications and worse COVID-19 outcomes.[2]

For additional information, please access HPNA's COVID-19 Resource page at www.advancingexpertcare.org.

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