NAUSEA AND VOMITING

OVERVIEW:
The pre-hospital provider should be very careful to ensure that patients who present with vague complaints such as nausea and vomiting are thoroughly evaluated. The patient's symptoms and recent history must determine the most appropriate care. Frequently, treatment of an underlying cause and limiting movement may resolve or greatly reduce these complaints. However, persistent nausea and vomiting of unknown etiology may respond well to pharmaceutical therapy. All patients presenting with nausea and vomiting should be screened for potential life-threats initially. Anti-emetic treatment should occur only as a secondary priority.

HPI	Signs and Symptoms	Considerations
- Age - Time of last meal - Last bowel movement, emesis - Improvement, worsening with food or activity - Duration of signs and symptoms - Other sick contacts - Past medical, surgical history - Medications - Menstrual history (pregnancy) - Travel history - Recent trauma	- Pain - Character of pain (constant, intermittent, sharp, dull, etc.) - Distention - Constipation - Diarrhea - Anorexia - Radiation - Associated symptoms (helpful to localize source) - Fever, headache, blurred vision, weakness, malaise, myalgias, cough, dysuria, mental status changes, rash	- CNS (increased pressure, headache, lesions, trauma, hemorrhage, vestibular) - Drugs (NSAID's, antibiotics, narcotics, chemotherapy) - GI or renal disorders - Gynecological disease (ovarian cyst, PID) - Infections (pneumonia, influenza) - Electrolyte abnormalities - Food or toxin induced - Medications, substance abuse - Pregnancy - Psychologic

		EMT	EMT	A	I	P
1.	Perform general patient management.	•	•	•	•	•
2.	Support life-threatening problems associated with airway, breathing, and circulation.	•	•	•	•	•
3.	Administer oxygen to maintain SPO_2 94 - 99%	•	•	•	•	•
4.	Allow the patient to lie in a comfortable position.	•	•	•	•	•
5.	Establish an IV of normal saline per patient assessment.			•	•	•
6.	Assess for signs of shock. If shock is suspected, follow the *Pediatric Shock protocol*.	•	•	•	•	•

NAUSEA AND VOMITING

			EMT	EMT	A	I	P
7.	For severe nausea or vomiting, if available, give _ONDANSETRON (ZOFRAN)._ • *If only IV formulation is available, administer 0.1 mg / kg IV / IM up to 4 mg over 2 to 5 minutes.*				•	•	•
8.	In lieu of IV ONDANSETRON, may administer 4 mg PO _ONDANSETRON OTD_ tablet for patients over 44 lbs (20 kg).			•	•	•	•
9.	May repeat Ondansetron PO or IV dosing after 10 minutes, if needed.				•	•	•
10.	Perform ongoing assessment as indicated and transport.			•	•	•	•

Age	Term	6 months	1 year	3 years	6 years	8 years	10 years	12 years	14 years
Weight (lb / kg)	6.6 lb 3 kg	17.6 lb 8 kg	22 lb 10 kg	30.8 lb 14 kg	44 lb 20 kg	55 lb 25 kg	75 lb 34 kg	88 lb 40 kg	110 lb 50 kg
Ondansetron (IV) 0.1 mg / kg			1.0 mg	1.5 mg	2.0 mg	2.5 mg	3.5 mg	4.0 mg	4.0 mg

PEARLS:
1. Nausea and vomiting has many subtle, sometimes life threatening causes. Do not minimize its importance as a symptom.
2. Ondansetron may not be as effective for vertigo and labyrinthitis related nausea and vomiting.
3. For nausea and vomiting associated with dehydration, fluid replenishment may be sufficient in improving patient comfort and reduce the need for medication administration.
4. Ensuring that you have reasonably addressed possible causes, will help minimize the potential that you are overlooking a life-threat and/or concern that should receive priority over anti-emetic treatment.
5. In cases of toxic ingestion, including alcohol, poisons, and drug overdoses, vomiting is an internal protective mechanism and should not be prevented with pharmacological therapy in the pre-hospital environment. Care should be given to prevent aspiration.
6. Ondansetron is also safe and effective for nausea and vomiting in trauma patients and can be used in conjunction with pain management.
7. Proper documentation should include the mental status and vital signs before and after medication administration.