Foundations Frameworks
Approach to Nausea and Vomiting
Author: Andrew Ketterer, MD, MA
Editors: Emilie Powell, MD, MS, MBA and Kristen Grabow Moore MD, MEd

Unstable vital signs?
Place IV, fluids (usu. prefer LR)

Check glucose and hCG

Diagnostic workup based on exam and initial findings (differential diagnosis should include non-GI causes)

Focal neuro sx?
Headache? Vision changes? AMS?

Abdominal pain and tenderness?
Diarrhea? EtOH? Travel? Recurrent?

GU symptoms?
Flank pain/CVAT?
Vaginal/penile bleeding or discharge?

Exertional? EKG abnormalities?
Elderly, female, or diabetic?

Kussmaul breathing or fruity odor? Markedly dehydrated?

H/o depression or SI? AMS? Toxidrome present?

Neuro
e.g. increased ICP, ICH, infection, vertigo, migraine

GI
e.g. obstruction, biliary, pancreatitis, GIb, hepatitis, gastritis, gastroparesis, appy

GU/Gyn
e.g. ovarian or testicular torsion, pregnancy, PID, pyelonephritis, renal colic

Cardiac
e.g. acute coronary syndrome, heart failure

Endocrine
e.g. adrenal crisis, diabetic ketoacidosis, electrolyte abnormalities

Tox
e.g. ASA, acetaminophen, ethanol, toxic alcohol, chemotherapy, iron

Symptomatic treatment (give while addressing underlying cause)

First line:
Serotonin antagonists
e.g. ondansetron
SE: prolonged QTc, possible pregnancy effects

Second line:
Dopamine antagonists
e.g. metoclopramide, prochlorperazine, etc.
SE: sedation, inc QTc, extrapyramidal sx

Antihistamines
e.g. meclizine, diphenhydramine
SE: sedation, urinary retention

Benzodiazepines
e.g. lorazepam, alprazolam, etc.
SE: sedation, airway compromise

Special cases:
Pregnancy
Pyridoxine, doxylamine (category A)
Ondansetron, metoclopramide (category B)