

### *How's your knowledge of nausea and vomiting?*

#### Did you know that...

- Nausea can be **chemically** induced via the “**chemoreceptor trigger zone**”, or can come from the **vestibular** nucleus (the “**inner ear**”).
- “**Chemically** induced nausea” could be caused by **opiates**, by **chemotherapy**, by **toxins** (from renal failure, liver failure, medications etc.) or by inflammatory substances from the **cancer itself**.
- “**Chemically** induced nausea” such as that caused by **medications** should be treated with a **dopamine blocker** first line.
- **Haloperidol** is the best dopamine blocker for nausea. 1mg q 6h prn usually works well. It can be given sc or po. It can be given bid routinely if nausea is constant.
- **Prochlorperazine** (Stemetil <sup>TM</sup>), **metoclopramide** and **domperidone** are other dopamine blockers, which work, but are **less effective or more toxic** than haloperidol.
- “**Chemically** induced nausea” can also be treated with **ondansetron** (Zofran <sup>TM</sup>) or granisetron (Kytrel <sup>TM</sup>), but they are very expensive.
- “**Chemically** induced nausea” will respond to **steroids** (e.g. dexamethasone) and **anticholinergics** such as scopolamine (Transderm-V <sup>TM</sup>). Watch for toxicity from both.

**\*\*Practice Tip: Antihistamines such as dimenhydrinate (Gravol <sup>TM</sup>) should be reserved for nausea from the vestibular system—e.g. motion sickness or vertigo, or else used as a last resort when other antiemetics fail\*\***

So, how about re-writing those Demerol and Gravol orders for morphine (or hydromorphone) and haloperidol instead?

And remember to be on the lookout for bowel obstruction. It will require more than the usual meds.

**\*\*Practice Tip: If the patient is vomiting feces, and the bowels are moving poorly or not at all, they are obstructed (obviously). If the patient is vomiting large amounts (litres) of undigested food infrequently (once or twice a day), they have a gastric outlet obstruction. Antiemetics are unlikely to work. They may need steroids, octreotide or even surgery. You might wish to ask a palliative care consultant\*\***

Want to learn more? Call us: Palliative Care Community Advice Line: (905) 548-5565 — available 24 hrs a day.

*We're here to help you.*