

## PALLIATIVE CARE TIPS

### Issue # 5 Nausea and Vomiting

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Nausea is often multi-factorial. It occurs in over 60% of Advanced Cancer Patients with vomiting as well in about 30%. Treatment is targeted based on etiologies.

#### Most Common Etiologies in Advanced Cancer Patients:

- GI:**
  - constipation/obstipation (one of the most common, and overlooked causes)
  - gastric stasis; bowel dysmotility (some causes include: direct invasion of enteric nervous system by tumour, paraneoplastic autonomic dysfunction or 'squashed stomach syndrome' secondary to enlarged liver/spleen or mass)
  - oro-naso-/pharyngeal disease (fungating H&N tumours, poor hygiene, Candida)
- Metabolic:** hypercalcemia; uremia hepatic dysfunction; hyperglycemia
- Drugs and Toxins:** stimulation of chemoreceptor trigger zone (CTZ) (ex. by opioids), or GI irritation (ex. by NSAIDs or antibiotics); polypharmacy; toxins due to infection, ischemia.
- CNS:** Brain mets /intracranial bleed/infarct (leading to increased ICP); vestibular dysfunction.
- Treatment induced:** chemo (especially Cisplatin, Cyclophosphamide, Doxorubicin), RT.
- Gastritis/duodenitis/ulcer disease** (NSAIDs, EtOH, *H. pylori*)
- Psychogenic/cortical:** anticipatory anxiety; triggers such as food odours etc.

**Management:** Treat underlying reversible causes depending on goals of care + patient condition. Consider using sc route for meds and hydration if symptom affecting ability to take by mouth.

**1. Constipation/Obstipation:** See Issue #3 Palliative Care Tips

**2. Gastric Stasis:** a) Regardless of etiology, Metoclopramide is drug of choice as it works both centrally on CTZ with inhibition of dopamine receptors and peripherally to stimulate gastric motility. Start 10mg po/sc q1h prn to q4h ATC (around the clock) and q1h prn. If Metoclopramide not tolerated (such as due to extrapyramidal side effects), may switch to Domperidone 10mg po QID instead.

b) When regular Metoclopramide ineffective, Dexamethasone 8 mg po/sc twice daily x 24h then decrease to lowest effective dose.

c) When above not effective, consider Ondansetron 8mg po/sc q8h.

**3. Bowel Obstruction:** Always consider surgery (or stent placement if lesion very proximal or distal in GI tract). When surgery is not an option:

**Partial Bowel Obstruction:** a) Use Metoclopramide to improve bowel motility

b) Dexamethasone 8 mg po/sc BID to QID, then decrease to lowest effective dose.

c) Use laxatives and enemas (impacted feces may be obstructing agent).

d) NG tube ONLY if copious vomiting and abdominal distention and as a temporary measure; could also use Octreotide to decrease gastric secretions.

**Complete Bowel Obstruction:** a) If complete obstruction unresolved: consider decompression PEG (allows fluid intake for pleasure).

b) Discontinue prokinetic agents (can cause reverse peristalsis and increase emesis).

c) Dexamethasone as above.

d) Haloperidol 1-2 mg sc ATC and q1h prn

e) Hyocine Butylbromide 10-20mg scq4h or Octreotide 100 microgr. sc BID to TID (decrease GI motility and GI secretions).

f) NG temporary only.

g) Ganisetron 3mg IV q24h for persisting nausea despite above

**Metabolic:** If hypercalcemia, tx with hydration and Bisphosphonate.

**Vestibular:** consider Scopolamine patch or other antihistamine agents

**Gastritis:** consider treatment with PPI or H2 blocker.

**Remember:** For referrals, questions, or telephone consultations call (780)496-1300.