Nausea and Vomiting in Advanced Cancer – "The Cleveland Clinic Protocol."

Presented by: Sungho Bak, Feb 28th, 2013

Reference:Authors: Mona Gupta, Mellar Davis, Susan LeGrand, Declan Walsh, Ruth Lagman. ***Supportive Oncology.*** 2012 (Article in Press).

Abstract:
Nausea and vomiting are common and distressing symptoms in advanced cancer. Both are multifactorial and cause significant morbidity, nutritional failure, and reduced quality of life. Assessment includes a detailed history, physical examination and investigations for reversible causes. Assessment and management will be influenced by performance status, prognosis, and goals of care. Several drug classes are effective with some having the added benefit of multiple routes of administration. It is our institution's practice to recommend metoclopramide as the first drug with haloperidol as an alternative antiemetic. Dexamethasone should be used for patients with central nervous system metastases or bowel obstruction. If your patient is near death, empiric metoclopramide, haloperidol or chlorpromazine is used without further investigation. For patients with a better prognosis, we exclude reversible causes and use the same first-line antiemetics, metoclopramide and haloperidol. For those who do not respond to first-line single antiemetics, olanzapine is second line and ondansetron is third. Rarely do we use combination therapy or cannabinoids. Olanzapine as a single agent has a distinct advantage over antiemetic combinations. It improves compliance, reduces drug interactions and has several routes of administration. Antiemetics, anticholinergics, octreotide and dexamethasone are used in combination to treat bowel obstruction. In opiod-naïve patients, we prefer haloperidol, glycopyrrolate and an opioid as the first-line treatment and add or substitute octreotide and dexamethasone in those who do not respond. Non-pharmacologic interventions (mechanical stents and percutaneous endoscopic gastrostomy tubes) are used when nausea is refractory to medical management or for home-going management to relieve symptoms, reduce drug costs and rehospitalization.

Strengths:
- Introduction of pathophysiology of nausea and vomiting in relation to the mechanism of medications.
- Target population was advanced cancer patients.
- Empiric guidelines of treating nausea and vomiting in cancer patients.

Weaknesses:
- Lack of clinical data about efficacy rates or difference in their efficacy of each medication treatment.
- Efficacy rates between monotherapy vs. combination therapy.
- More detailed reports of the side effects or adverse effects of monotherapy and combination therapy.

Relevance to Palliative Care:
It provided a useful empiric guideline how to manage nausea and vomiting, common and distressing symptoms, in advanced cancer. The treatment regime should be tailored individually especially when a patient is terminally ill or imminently dying; decisions to intervene are complicated and need to be based on patient/family goals of care and the risks and benefits of the intervention. Also non-pharmacologic approaches should be used depending on the clinical circumstances and patient prognosis.