

MANAGEMENT OF NAUSEA IN PATIENTS WITH CHRONIC KIDNEY DISEASE

Assessment

- Assess duration and frequency of nausea and if any associated vomiting/abdominal pain/constipation.
- Assess and optimize possible contributing factors.
 - Glycemic control
 - Fluid status
 - Minimize/substitute medications that can cause nausea (e.g. opioids, tramadol, iron supplements, SSRI's, bupropion, phosphate binders)
 - Inadequate dialysis prescription / underdialysis (if applicable)
 - Treat constipation if present

Non-pharmacological Strategies

- Liberalize diet restrictions (salt, phosphorus, potassium) if safe to do so.
- Reduce or eliminate potentially nauseating stimuli (e.g., spicy, strong-smelling and high fat foods). Encourage a trial of cold, bland foods instead.
- Try using ginger products (e.g. tea, tablet, ginger ale, cookies, candied ginger).
- Eat frequent small, high calorie meals and snacks — hunger can make feelings of nausea stronger.
- Sit upright or recline with head elevated for 30-60 min after meals.
- Good oral hygiene — can help reduce unpleasant mouth taste contributing to nausea.
- Wear loose clothing.
- Apply a cool damp cloth on neck or forehead if very nauseous.
- Consider relaxation, imagery, acupressure, acupuncture.
- For PD patients, consider modifying PD exchange times and volumes around meals to minimize nausea that may be associated with eating.
- See BCPRA patient teaching tool “Tips for People with Nausea and/or Poor Appetite.”

Pharmacologic Interventions

- Haloperidol, 0.25 to 0.75 mg po at HS increasing to BID then TID PRN
- OR**
- Methotrimeprazine, 2 to 5 mg po TID PRN (more sedating option)
 - If options above fail, consider a 5HT3 antagonist (e.g. Ondansetron, 4 to 8 mg po daily to BID PRN).
 - Note: Ondansetron is very expensive; consider risk of QT prolongation in the setting of possible electrolyte abnormalities.
 - For patients with gastric stasis/gastroparesis, consider metoclopramide 5 mg po QID PRN or domperidone 5 to 10 mg po TID PRN. If domperidone is used, consider risk of QT prolongation in the setting of possible electrolyte abnormalities.

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- **Dimenhydrinate** is mostly efficacious for nausea/vomiting caused by vestibular dysfunction, motion disorder and increased intra-cranial pressure. Chemoreceptor activation is thought to be the cause of CKD related nausea/vomiting, for which dimenhydrinate is not effective. If dimenhydrinate is used, consider risk of anticholinergic activity which may worsen constipation and dry mouth.
- Go to www.bcrenalagency.ca (Health professionals > CKD) for information on costs of medications and whether coverage may be available through BCPRA, Pharmacare or Palliative Care benefit plans

Please note that no studies have been published on the management of nausea and vomiting in chronic kidney disease patients, dialysis or non-dialysis. Evidence from palliative care, heart failure and oncology guidelines were used to support this algorithm.

References

1. BC Heart Failure Network. Nausea and Vomiting Heart Failure Symptom Management Guideline. January 2015.
2. Cancer Care Ontario. Nausea and Vomiting in Adults with Cancer: Screening and Assessment. August 2010. <https://www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=350823>
3. Ersnt, E and Pittler, MH. Efficacy of ginger for nausea and vomiting: a systematic review of randomized clinical trials. British Journal of Anaesthesia 2000; 84: 367-71.
4. Palliative Care Guidelines: Renal Palliative Care. Symptom Control in Patients with Chronic Kidney Disease/ Renal Impairment. August 2014. <http://www.palliativecareggc.org.uk/wp-content/uploads/2015/12/RenalPalliativeCarefinalmar2011.pdf>