

FAST FACTS AND CONCEPTS #96 DIARRHEA IN PALLIATIVE CARE

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Diarrhea is a debilitating and embarrassing problem, defined as an abnormal looseness of the stools (increased liquidity or decreased consistency). Patients with uncontrolled diarrhea are at increased risk for dehydration, electrolyte imbalance, skin breakdown, and fatigue.

Common Causes Diarrhea can usually be divided into different types and treatment will vary depending on cause: secretory, osmotic, mechanical, or disordered motility. In palliative care, the overuse of laxatives, typically seen when the management of constipation is suddenly 'stepped-up,' is a common cause. Other causes include partial intestinal obstruction, pancreatic insufficiency, *Clostridium difficile* infection, and radiation enteritis. Chemotherapeutics are another common cause, especially in advanced cancer where the incidence can be up to 60% (diarrhea may be even more common with chemotherapy regimens with 5 fluorouracil boluses or combination of irinotecan and fluoropyrimidines). Infectious diarrhea is especially common in HIV infection (*Cryptosporidia*, *Giardia lamblia*, *E. histolytica*, and Cytomegalovirus). Severe constipation and fecal impaction can also cause diarrhea as backed-up, liquefied stool may be all that the patient can pass ('overflow diarrhea').

Evaluation Review diet, medications, laxatives, procedures, timing of movements in relation to ingestion of food or liquids, and a description of quantity and quality of stool. When performing a physical exam, make sure to palpate the abdomen and do a rectal exam. Radiographs are often not necessary, but may help clarify a partial bowel obstruction or overflow diarrhea. Keep in mind that patients at the end-of-life are also at risk for developing the same diarrheal illnesses that occur in the general population (viral/bacterial gastroenteritis, adverse effects of medications).

Treatment

- **General** Ensure adequate hydration; encourage sips of clear liquids; parenteral hydration should be considered for severe dehydration. Simple carbohydrates, toast or crackers, will add back small amounts of electrolytes and glucose; milk and other lactose-containing products should be avoided.
- **Medications** include bulk forming agents, antimicrobials, adsorbents, and opioids.
 - **Kaolin and Pectin** (Kaopectate®) is a suspension of adsorbent and bulk-forming agents, which can provide modest relief from diarrhea. However, kaolin-pectin may take up to 48 hours to produce an effect and can interfere with the absorption of certain medications.
 - **Antibiotics:** infectious diarrhea should be identified and treated with appropriate antibiotics, particularly *C. difficile* enteritis.
 - **Bismuth** has an additional antimicrobial effect, and can be added for increased symptomatic control against organisms such as enterotoxigenic *E. Coli*.
 - **Loperamide** (Imodium®), an opioid, reduces peristalsis in the gut, increases water reabsorption, and promotes fecal continence, making it a potent anti-diarrheal agent. Because it only weakly crosses the blood-brain barrier, loperamide's side effect profile is more favorable than other opioids (e.g. codeine or diphenoxylate [Lomotil®]). The initial dose of loperamide is 4 mg, with titration to 2 mg after each loose stool, with the typical dose being 4 – 8 mg per day. Although the package insert recommends a maximum of 16 mg in a 24-hour period, up to 54 mg per day of loperamide has been used in palliative care settings with few adverse effects. Note: loperamide should be used with caution if an infectious diarrhea is suspected.
 - **Aspirin and Cholestyramine** can reduce the diarrhea in radiation-induced enteritis, as can addition of a stool bulking agent such as psyllium (Metamucil™).
 - **Mesalamine** and other antiinflammatories are used for inflammatory bowel disease.
 - **Pancreatic Enzymes** such as pancrelipase are used for pancreatic insufficiency.
 - **Octreotide**, although costly, is effective with profuse secretory diarrhea seen in HIV disease, chemotherapy induced diarrhea, and those with high effluent volume from a stoma. It may be given via continuous subcutaneous infusion at a rate of 10 – 80 mcg every hour until symptoms improve.

- **Budesonide, probiotics and activated charcoal** have been described in the literature for use in chemotherapy induced diarrhea, but their role in the clinical setting is not yet established.

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