Mechanical Complications Related to Constipation: Bowel Management

BCRenal
Provincial Health Services Authority

A primary cause of mechanical complications resulting in difficulty filling or draining is constipation. The position of the PD catheter is maintained low in the pelvis by peristalsis of the intestines. Gut health and regular bowel movements are crucial to maintain catheter function and position. Unfortunately, constipation is very common in patients on peritoneal dialysis caused by dietary and fluid restriction, medications, potentially older age of some patients, and a more sedentary lifestyle.

Patients on peritoneal dialysis are expected to have a bowel movement at least daily with the aim of soft stool but not diarrhea. (i.e. Bristol Stool Scale 3 or 4) Patients are instructed to use medication in a stepwise manner if required to ensure proper bowel function. The following care path suggests management of non-emergent constipation.

If the patient presents with acute absolute constipation with any red flag features; severe pain, vomiting, signs or symptoms of peritonitis, or per rectal bleeding they should be treated as an acute abdomen and managed and investigated appropriately.

Clinical Care Path:
Bowel Management

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Step 1: Ensure adequate hydration with enough dietary fiber within restrictions.
Recommendation for daily fiber intake is 20-38g. If this cannot be achieved through diet fiber, supplements such as psyllium husk can be utilized with success. This is less likely to affect phosphate absorption but recommend dietary consultation as soon as able.

Step 2: Stool softeners
Increases the amount of water in stool to make it easier to pass. Most patients will be on daily stool softeners
Typical regimes: Docusate 200mg PD daily

Step 3: Stimulant laxatives;
Irritates sensory nerve endings to stimulate colonic motility and reduce water absorption.
Typical regimes: Sennosides 2 tabs at night

Step 4: Osmotic laxatives
Draws water into intestine to hydrate and soften stool (more aggressive than softeners). Patients have access to these at home. Patients will not require daily use but may have a regime with regular use of an osmotic agent.
Typical regimes:
PEG 17g (1 sachet) - 2 sachets daily
Lactulose 10ml - twice daily
These can be escalated until bowels are working well.

Step 5: Suppositories/enemas
Additional suppositories such as bisacodyl and glycerol can be utilized if bowels have still not moved. Enemas can also be utilized but phosphate containing enemas such as Fleet™ should be avoided.

Step 6: Further investigation/hospital admission.
Investigating mechanical bowel issues should be explored if bowels have not moved after above input with subsequent inflow/outflow problems. If there are any clinical concerns an abdominal X-ray will provide quick screen - this will hopefully clarify presence of fecal loading versus other intra-abdominal pathology. The patient may require a hospital admission. The PD Unit should be informed.