Assessment

Constipation is common in patients with kidney disease. Causes include:

• Dietary restrictions (e.g. reduced potassium and phosphorous diets) may result in reduced dietary fibre intake.
• Fluid restrictions for some patients.
• Physical activity may be reduced.
• Some medications used to treat kidney disease can be constipating. e.g. iron, phosphate binders, potassium binding resin, antihistamines for pruritus.

The goal is for regular bowel movements, e.g. every 1 - 2 days. This will also help to minimize the risk of hyperkalemia.

Non-pharmacological Strategies

• Encourage fibre, within allowed diet restrictions. Goal is for 20 - 38 gm per day.
• Optimize fluid intake, within allowed diet restrictions.
• Encourage physical activity.
• See BCPRA patient teaching tool on “Constipation.”

Pharmacologic Options (see options on the next page)

Initial treatment:

• If no BM after 3 days, add PEG 3350 without electrolytes 17 g orally daily PRN or lactulose 15-30 mL orally daily PRN. Titrate to effect.
• For chronic constipation, consider maintenance therapy with regular lactulose or PEG 3350 without electrolytes (+/- docusate, only if hard stool).
• For PD patients, senna glycosides and bisacodyl may be necessary as an initial therapy.

If constipation persists despite the above:

• If no BM for 7 or more days, rule out fecal impaction & bowel obstruction.
• Consider rectal therapies PRN, i.e., suppository, Microlax enema (excluding Fleet enema) or manual disimpaction.
• If no fecal impaction, add senna glycosides or bisacodyl orally PRN. Titrate to effect.
• Titrate the scheduled laxative regimen to regular BM pattern of q1-2 days.
# LAXATIVE OPTIONS IN PATIENTS WITH CHRONIC KIDNEY DISEASE

## Recommended

**Osmotic Laxatives**
- Not absorbed – does not affect blood glucose in diabetics

<table>
<thead>
<tr>
<th>Lactulose</th>
<th>Onset: 24 to 48 hours</th>
<th>Usual starting dose: 15-30 mL po daily PRN or regularly</th>
<th>Flatulence more common</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene glycol 3350 (e.g. Lax-a-day®, Restoralax®)</td>
<td>Onset: 48 to 96 hours</td>
<td>Usual starting dose: 17g po daily</td>
<td></td>
</tr>
</tbody>
</table>

**Stimulants**
- Onset: 6-12 hours
- Tolerance may occur with regular use

<table>
<thead>
<tr>
<th>Senna glycosides (Senokot®)</th>
<th>Usual starting dose: 8.6-12mg po HS PRN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisacodyl (e.g. Dulcolax®)</td>
<td>Usual starting dose: 5mg po HS PRN</td>
</tr>
</tbody>
</table>

**Stool Softener**
- Onset: 12 to 72 hours
- Requires adequate water intake for effect. May not be as effective for patients with restrictions on water intake, e.g., dialysis patients

<table>
<thead>
<tr>
<th>Docusate</th>
<th>Docusate sodium – usual starting dose: 100-200mg po daily</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Docusate calcium – usual starting dose: 240-480mg po daily</td>
</tr>
</tbody>
</table>

**Suppositories/Enema**
- For PRN use only; not recommended for chronic use

<table>
<thead>
<tr>
<th>Glycerin or bisacodyl suppository</th>
<th>Onset: 15 to 60 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Usual dose: 1 suppository PR PRN</td>
</tr>
<tr>
<td>Microlax® enema</td>
<td>Onset: 2 to 15 minutes</td>
</tr>
<tr>
<td></td>
<td>Usual dose: 1 enema PR PRN</td>
</tr>
</tbody>
</table>

## Use with Caution

**Fiber** (psyllium, guar gum, calcium polycarbophil) e.g. Metamucil®, Prodiem®
- Must be taken with > 250mL of water to prevent fecal impaction; therefore, not the best option for dialysis patients with fluid restriction
- May affect absorption of medications and need to space apart from other medications

**Fleet enema**
- Contains phosphorus and best to avoid
- Occasional PRN use per rectum will not likely result in significant phosphorus absorption

## Do Not Use

**Magnesium containing laxatives** e.g. Milk of Magnesia, Mg citrate
- Risk of hypermagnesemia due to the accumulation of Mg²⁺

**Phosphate containing laxatives** e.g. oral sodium phosphate
- Risk of hyperphosphatemia due to the accumulation of Phosphorus

**Mineral oil e.g. Magnolax**
- May impair absorption of fat soluble vitamins and increase the risk of aspiration pneumonia

**Polyethylene glycol (PEG) with electrolytes**
- May cause electrolyte imbalances and high volume water loss

**Sorbitol 70%**
- May cause intestinal necrosis when used in combination with potassium binding resin

**Fruitlax**
- Contains K⁺; may cause hyperkalemia

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Go to [bcrenalagency.ca > Health Professionals > CKD](http://bcrenalagency.ca) for information on costs of medications and whether coverage may be available through BCPRA, Pharmacare or Palliative Care benefit plans.