

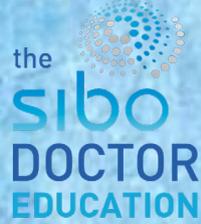
CLINICAL CHEAT SHEET



PODCAST 44

SIBO and Prokinetics

Dr Nirala Jacobi in conversation with
Dr Allison Siebecker



Dr Siebecker can be contacted via her website - SIBOinfo.com

Impaired motility is a major underlying cause of SIBO. Two thirds of SIBO cases relapse. Prokinetics become a critical tool to lengthen the remission period.

Migrating motor complex

- This movement happens while fasting (between meals and overnight), prokinetic taken before bed for this reason
- MMC is often deficient in cases of SIBO and is a main underlying cause therein.
- MMC stimulation helps clear out bacteria from the SI
- Snacking in between meals can disrupt the MMC
- Stress also turns off the MMC

Prokinetics

- Stimulate the MMC of the small intestine
- Typically, prokinetic protocols take place after antimicrobial treatments.
- Can be done between rounds of anti-microbials to prevent backsliding
- Rounds of anti-microbials are recommended to avoid ineffectiveness/microbial resistance
- Prokinetics can be used to provide symptomatic relief

Laxatives vs prokinetics

Laxatives and prokinetics have distinct definitions which are often confused:

- A prokinetic amplifies and coordinates gastrointestinal motility
- A laxative produces a bowel movement

Laxatives

- Laxatives do not stimulate the MMC.
- While a prokinetic may have a laxative effect, the reverse cannot be true.
- There are three types of laxatives – osmotic, stimulant and pro-secretory.
- Osmotic is the most commonly used and its action of drawing water into the intestine is enabled by large in-absorbable molecules. They do not force water in. Examples are Magnesium and Miralax.

• Stimulant and Pro-secretory laxatives use active transport of large intestine cells to secrete water into the lumen. Examples include Senna, Bisacodyl, Dulcolax.

• All laxatives can cause irritation/contraction which is associated with cramping, patients may need to explore to find one they tolerate well.

• Magnesium is Dr. Siebecker's favourite laxative as it is also a cofactor for many other biochemical pathways

Magnesium as a laxative

- Use a form that is not very absorbable.
- There will still be some absorption that is beneficial.
- Often taken at 1000mg before bed for chronic constipation but can be up to 1500mg.
- Pay close attention to the dosing, most magnesium supplements on the market are 100-200mg per pill.
- Magnesium is well tolerated and remains effective over time (no adaptation)
- Take magnesium two hours from the time of last meal before bed to achieve greatest potency.
- Magnesium can take 2-3 days to produce a bowel movement. Important to play around to find the correct dose.
- Besides SIBO, Prokinetics are good for treating gastroparesis, and slowed gastric emptying.

Prokinetic types

Pharmaceutical

- Erythromycin – low dose (usually 50mg) before bed has little to no antibiotic effect. Helpful in treating gastroparesis. Development of tolerance has been observed.
- Prucalopride (Resotrans) – safest pharmaceutical prokinetic, Neuroprotective and neurogenerative, not metabolised via CYP450 pathway so minimal drug interaction concerns. Dose of 0.5mg before bed. Development of tolerance has been observed, removing treatment for two weeks will often see restored effectiveness.
- Low dose Naltrexone (LDN) – Anti-inflammatory, immune balancing, can assist with mood disorders, not typically a prokinetic but stimulates release of our own opioids. Opioids have a myriad of effects including a prokinetic like effect. Not effective in about 1/3 of patients. Can cause sleep side

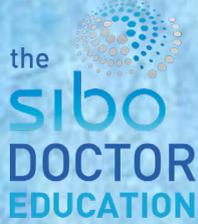
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effects, start with 0.5-1mg and slowly increase to 2.5mg for diarrhoea or 4.5mg for constipation.

Natural

- Iberogast – long history of clinical use, very safe, studies have indicated it is a stronger prokinetic than pharmaceutical options. Well tolerated with children. Can be used for symptomatic relief throughout the day. Dose 30-60 drops before bed.
 - Ginger root – helps with nausea/morning sickness. Dose 1000mg in capsules. Ginger is anti-inflammatory and anti-neuro-inflammatory, antioxidant. Be careful of ginger burn in acid reflux prone patients. Development of tolerance has been observed.
- Ginger containing prokinetic formulas include Motilpro, Pro-kin, Motility activator, Gi motility complex, SIBO MMC, Bio. Me.Kinetic) and also include various other useful herbs and nutrients.

Quick tips

Dr Mark Pimentel recommends, upon clearing SIBO, hold off on prokinetics, unless the patient has positive anti-vinculin and anti Cdtb antibodies, until first relapse, to determine patient relapse time.

- Dr Siebecker sometimes combines prokinetic agents for more difficult cases. For example, LDN and Iberogast while trying to get LDN to the appropriate dosage. Prucalopride at night, LDE in the morning, or Iberogast and ginger.
 - Patients may have diarrhoea in the large intestine but SIBO with bloating and slow motility in the small intestine. The motility in the small intestine can be different to that of the large intestine.
- One of the reasons why diarrhea presents with SIBO is due to the small intestinal wall triggering a release of fluid to flush out the overgrowth of bacteria.
- Motility is often an underlying cause of SIBO but not always
 - Patients with obstructive pathologies such as adhesions or endometriosis which lead to SIBO may get worse if

administered prokinetics as the issue was not motility. MMC tests for patients with obstructions may actually show a hyperactive MMC

- The IBS smart blood test tests for anti-vinculin and CdTb antibodies. This test can clearly indicate if the patient needs prokinetics.

Methane dominant SIBO vs IBS-C Methane

- Possibly can be considered as a different condition
- Less likely to be preceded with a case of gastroenteritis
- Allison finds prokinetics very helpful for her patients with Methane dominant SIBO
- Finds prucalopride and Magnesium together is sometimes needed
- IBS-C Methane – High baseline methane that stays high, prokinetics may not be needed
- Methane SIBO is over-diagnosed and over-treated. As we get older methane naturally rises in many people who remain asymptomatic

When to dose prokinetics

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- Dr. Siebcker is releasing her first online education course soon, head over to www.siboinfo.com and sign up to stay updated.

