IRRITABLE BOWEL SYNDROME (IBS)

Top tips for MURs

- Discuss with the patient that IBS is a benign condition where symptoms can be managed but can't be cured
- Establish whether patient has IBS with constipation, IBS with diarrhoea or mixed IBS - as treatment and management depends on the nature, type and severity of IBS
- Check that the patient knows to take loperamide only if diarrhoea occurs and not continuously
- Advise the patient that bulk-forming laxatives should not be taken immediately before going to bed and that they usually take two to three days to have an effect. The dose should be started low and titrated slowly, if necessary, every few days until one or two soft formed stools are produced every 1 or 2 days (Bristol stool scale, type 4)
- Advise patient that antispasmodics may be used on an 'as required' basis and should be taken before meals
- Counsel the patient that stress and anxiety can trigger symptoms of IBS. If the patient suffers from stress, recommend relaxation techniques or yoga
- Counsel the patient on use of linaclotide, stating that they will need to be reviewed after 4 weeks to assess if effective and the benefits and risks of continuing treatment reconsidered
- Advise patients taking linaclotide to take 30 minutes before a meal and to discard any remaining capsules 18 weeks after opening
- Advise patients that it may be useful to keep a food and symptom diary whilst making dietary changes to see what has helped
- Counsel patient on common side effects (**see overleaf**) and signs and symptoms of complications that need referral (**see red flags below**)
- Report any relevant adverse drug reactions to the Yellow Card Scheme

Pathophysiology of IBS

Irritable bowel syndrome is a chronic and relapsing gastrointestinal disorder characterised by abdominal pain. Symptoms may include bloating, altered bowel habits in the absence of an identified cause, nausea, diarrhoea, constipation, abdominal bloating, flatulence, urgency of evacuation and mucus in stools. The pathophysiology of IBS remains uncertain. There is no single treatment that helps all IBS symptoms and treatments include pharmacological, dietary modification and relaxation therapy. Foods high in fermentable oligosaccharides, monosaccharides and polyols (FODMAPs), have been identified as exacerbating IBS symptoms. Antispasmodics are recommended for use to treat bloating/ wind and pain; laxatives (not lactulose) are recommended to treat constipation and loperamide to treat diarrhoeal symptoms.

Lifestyle issues

- Advise patients who smoke of the benefits of smoking cessation and refer to Pharmacy Stop Smoking or Stop Smoking Wales services if willing to stop
- Advise patients to eat regular meals and avoids missing meals. Smaller meal sizes may ease symptoms
- Advise patient to adjust their fibre intake according to their symptoms. Consider limiting intake of high-fibre food (e.g. high fibre or wholemeal flour and breads, cereals high in bran and whole grains such as brown rice). If more fibre is needed, recommend soluble fibre e.g. ispaghula powder or foods high in soluble fibre e.g. oats, barley, rye or golden linseeds
- Advise patients to limit fruit to three portions a day (make up the recommended '5 a day' with vegetables)
- Advise patients to reduce intake of resistant starches, as they are not completely digested by the body and enter the bowel where they ferment and produce gas. These are often found in processed or re-cooked foods e.g. oven chips, crisps and reheated breads such as garlic bread, pizza base
- Advise patients to reduce fizzy drinks, sorbitol and artifical sweetener use
- If the person wants to try probiotics, advise them to take the dose recommended by the manufacturer for at least 4 weeks while monitoring the effect
- Advise patients to drink at least 8 cups of fluid per day, restricting tea and coffee to 3 cups per day, and reduce alcohol to within safe limits (up to 14 units per week spread over 3 or more days)
- Encourage patients to identify and make the most of their available leisure time and create relaxation time
- If symptoms persist despite lifestyle and dietary modifications, a low FODMAP diet is recommended by NICE (under the supervision of a healthcare professional with expertise in dietary management)

Red flags that need referral

The symptoms experienced in IBS can be similar to other more serious conditions such as Crohn's disease, coeliac disease or a gastro-intestinal carcinoma.

Refer any patient who reports any of the following:

- Rectal bleeding
- Worsening or changing symptoms persisting for more than 6 weeks in patients over 60 years
- Unintentional and unexplained weight loss
- Anaemia
- Abdominal or rectal masses
- Family history of bowel or ovarian cancer

Written by Emyr Jones, January 2015.
Expert review, Catherine Sutton, BCUHB, February 2016.
Updated by John Terry, ABMU HB, February 2017.

How do drugs used to treat IBS work?

The choice of medication is based on the predominant symptom. Doses should be titrated according to the clinical response, aiming to achieve a soft, well–formed stool (Bristol stool scale, type 4)

Loperamide Standard treatment for diarrhoea (no evidence of improvement in abdominal pain)		An opioid-receptor agonist which acts on the μ-opioid receptors in the myenteric plexus of the large intestine to slow intestinal motility and by affecting water and electrolyte movement in the bowel. It also affects peristaltic activity by a direct effect on the muscles of the intestinal wall.
Antispasmodics (e.g. mebeverine, alverine, peppermint and anti-muscarinics like hyoscine butylbromide)		Blocks the nervous system's stimulation of the gastrointestinal tract, helping to reduce severe cramping and irregular contractions of the colon. Antispasmodics are commonly used for pain in IBS and are occasionally helpful for the bloating.
Laxatives	**Bulk-forming** (e.g. ispaghula or sterculia) Preferred choice for constipation	Retains fluid within the stool and increasing faecal mass, leading to stimulation of peristalsis.
	Osmotic (e.g. macrogols)	Increases fluid in the large bowel by drawing water into the bowel from surrounding tissues. This produces distension, leading to stimulation of peristalsis. Lactulose is not recommended as it can cause cramps, flatulence and abdominal discomfort.
	Stimulant (e.g. senna or bisacodyl)	Acts on the intestinal mucosa or nerve plexus to alter water and electrolyte secretion and cause peristalsis by stimulating colonic nerves.
	Linaclotide ((second line therapy - for IBS with pain and constipation) considered if optimal/maximum tolerated doses of laxatives from different classes have not helped and the constipation for longer than 12 months.	A guanylate cyclase- C receptor agonist which activates sensory neurones in the colon causing decreased visceral pain, increased intestinal fluid secretion and accelerated intestinal transit.
Tricyclic anti-depressants (unlicensed) (Considered if antispasmodics, laxatives or loperamide ineffective - beneficial for pain and diarrhoea)		It is believed that these drugs reduce pain perception when used in low doses, although the exact mechanism of their benefit is unknown. Dose should be taken at night and reviewed regularly.
Selective serotonin reuptake inhibitors (Unlicensed) (beneficial for pain and constipation)		Can only be considered if tricyclics are ineffective. Low doses should be started and reviewed after 4 weeks, then every 6-12 months.

What are the common side effects to look out for?

Medication	Common side effects	Recommendation
Loperamide	Abdominal cramps, rash, flatulence, nausea, drowsiness or dizziness and less commonly headache	If severe refer to prescriber for review and possible medication switch.
Antispasmodics	Heartburn and perianal irritation can occur with peppermint oil	If severe refer to prescriber for review and possible medication switch.
	Dry mouth, blurred vision, urinary retention, constipation can occur when anti-muscarinics are used	Patient should be referred if the side effects are intolerable. These can be worse than the initial presenting complaint.
	Allergic reactions such as a rash and urticaria can occur with mebeverine	If severe refer to prescriber for review and possible medication switch.
	Itching, rash, headache, dyspnoea and nausea can occur with alverine	If severe refer to prescriber for review and possible medication switch.
Laxatives	Bloating, nausea and wind. Bulk-forming laxative can rarely cause an obstruction in the GI system	Increase dose gradually, to limit side effects. Drink plenty of fluids whilst using a bulk-forming laxative.

Potential serious drug interactions?

There are no significant drug interactions with loperamide, mebeverine, alverine, or therapeutic doses of peppermint oil. -
See BNF Appendix 1: Interactions for more details

Where can you find more information?

- Clinical knowledge summaries - Irritable bowel syndrome available at **http://cks.nice.org.uk**
- NICE clinical guideline 61. Irritable bowel syndrome in adults; diagnosis and management. Updated February 2015, available at **http://nice.org.uk**
- Irritable bowel syndrome network available at **http://www.theibsnetwork.org/** and irritable bowel syndrome group available at **www.ibsgroup.org**
- Steps for Stress available at **www.stepsforstress.org**
- **https://www.bda.uk.com/foodfacts/IBSfoodfacts.pdf**
- Chey W et al, Irritable bowel syndrome – a clinical review, JAMA 2015;313(9):949-958
- Trinkley K, Nahata M, Medication management of irritable bowel syndrome, Digestion 2014;89:253-267
- DBT, Does a low FODMAP diet help IBS? DTB August 2015;53(8):93-96

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