

Drs. Barclay, Cruz-Pereira, Flynn, Jovanovic, Loomes, Pai, Papp, Pearson, Petrunia, Rioux, Shah, Singh, Wishart & Zandieh Secure Fax: 1-888-398-7091

**CONFIRMATION:** Referral Received

TRIAGE CATEGORY: **Enhanced Primary Care Pathway** 

CLOSED **REFERRAL STATUS:** 

Dear Colleague,

The clinical and diagnostic information you have provided for the above-named patient is consistent with irritable bowel syndrome (IBS). Based on full review of your referral, it has been determined that management of this patient within an Enhanced Primary Care Pathway is appropriate, without need for specialist consultation at this time.

This clinical pathway has been developed by the Division of Gastroenterology in partnership with the South Island and Victoria Divisions of Family Practice. These local guidelines are based on best available clinical evidence, and are practical in the primary care setting. This package includes:

- 1. Focused summary of IBS relevant to primary care
- 2. Red flag symptoms
- 3. Additional investigations
- 4. Checklist to guide your in-clinic review of this patient with IBS symptoms
- 5. Treatment overview
- 6. Links to additional resources for patients
- 7. Links to additional resources for clinicians
- 8. Clinical flow diagram

#### This referral is **CLOSED**.

If you would like to discuss this referral, one of our Gastroenterologists is available for phone advice via the South Island RACE program 08:00-17:00 weekdays. This service is accessible by downloading the RACEApp+ on your smart phone.

If your patient completes the Enhanced Primary Care Pathway and remains symptomatic or if your patient's status or symptoms change, a new referral indicating 'completed care pathway' or 'new information' should be faxed to 1-888-398-7091.

Thank you.

**Kevin Rioux, MD PhD FRCPC** 

Medical Lead, Victoria GI Central Access and Triage

Division of Gastroenterology

# 1. Focused summary of IBS relevant to primary care

Irritable bowel syndrome is a common symptom complex characterized by **chronic abdominal pain and abnormal bowel function** in absence of organic cause. These key features of IBS can be widely variable in severity and may remit and recur, often being affected by dietary factors and various stressors. **Relief or worsening of abdominal discomfort related to bowel movement** is a defining feature. Bowel dysfunction includes frequent bowel movements, fecal urgency and even incontinence, altered stool form (hard/lumpy or loose/watery), incomplete evacuation, straining at stool, and passage of copious mucus.

IBS is frequently associated with other gastrointestinal symptoms including bloating, flatulence, nausea, burping, early satiety, gastroesophageal reflux, and dyspepsia. Extra-intestinal symptoms also frequently occur in IBS patients including dysuria and frequent, urgent urination, widespread musculoskeletal pain, dyspareunia, fatigue, anxiety, and depression.

Diagnostic criteria for IBS (e.g. Rome IV) were developed for uniform patient recruitment in clinical trials. In clinical practice, such criteria only provide a framework for assessing patients with suspected IBS. Diagnosis of IBS is based on Rome IV criteria (2016) of abdominal pain related to defecation and associated with change in stool frequency or form. IBS requires very little initial laboratory investigation – CBC, ferritin, and celiac disease screen according to most guidelines. The fecal immunochemical test (FIT) has not been validated for investigation of IBS-like symptoms; ordering FIT in this circumstance is inappropriate. Anemia or other red flag features increase the likelihood of organic disease and mandate referral to GI. Absence of red flags, however, does not completely exclude the possibility of organic disease. Various other intestinal and extraintestinal features often co-exist with IBS and provide support to the diagnosis. It is estimated that unrecognized organic disorders will be present in about 15% of patients who meet Rome IV criteria and do not have alarm features. The most common diseases that are mislabeled as IBS are celiac disease, Crohn's disease, and microscopic colitis. Fecal calprotectin can help distinguish IBS from IBD, but presently the test is done at cost to patients through Lifelabs (~\$125) unless the patient has IBD, and "IBD" is written on the lab requisition. GI cancers are very unlikely in patients that meet usual criteria for IBS.

The confident diagnosis of IBS relies on presence of foundational symptoms, recognition of intestinal and extra-intestinal symptoms and psychological stressors that support the IBS diagnosis, detailed medical history and physical examination as well as judicious use of investigations to identify red flag features and exclude organic conditions that mimic IBS.

A careful review of medications should be performed to identify ones that may be causing GI side effects (e.g. PPI, ASA/NSAIDs, laxatives/antacids, iron/calcium/magnesium supplements, calcium channel blockers, antidepressants, opioids, diuretics, herbal products).

### 2. Red flag symptoms

Red flag symptoms are symptoms which would suggest something other than IBS causing the current symptomatology in your patient. These would include:

Age of onset of symptoms > 50 years old	Family history of Colorectal Cancer (first degree
	relative, under the age of 60 only)
Rectal bleeding	Family history of IBD (first degree relative)
Melena	Weight loss (documented and unintentional, not
	subjective)
Anemia	Nocturnal symptoms

## 3. Additional investigations

If you suspect IBS, the following tests should be performed:

- All patients: CBC, Anti-TTG Ab
- IBS-diarrhea predominant symptoms: CBC, Anti-TTG Ab, fecal calprotectin, CRP, TSH, GPMP (Gastrointestinal pathogen multiplex panel), lactose intolerance test
- IBS-constipation predominant symptoms: CBC, Anti-TTG Ab, TSH, Calcium, Albumin
- IBS-mixed constipation and diarrhea symptomatology: CBC, Anti-TTG Ab

In absence of alarm features, what would prompt referral for GI consultation and possible colonoscopy? Colonoscopy may be helpful in patients with diarrhea predominance who have persistent symptoms or limited benefit from usual treatments. This is mainly to assess for Crohn's disease and microscopic colitis. However a fecal calprotectin avoids the risks of a colonoscopy and is more cost-effective. In patients with constipation predominance or alternating diarrhea and constipation, colonoscopy is very unlikely to yield relevant findings.

4. Checklist to guide your in-clinic review of this patient with IBS symptoms		
	Rome IV criteria for IBS: Recurrent <b>abdominal pain</b> ≥1 day per week in the last three months <b>related to defecation</b> or associated with <b>change of frequency</b> and/or <b>form (appearance) of stool</b> .	
	Absence of red flag features (bleeding, anemia, weight loss, nocturnal or progressive symptoms, onset after age 50)	
	No family history of inflammatory bowel disease, colorectal cancer, or celiac disease	
	Limited investigations based on IBS subtype	

#### 5. Treatment options

Treatment of IBS involves initial reassurance, dietary, behavioral interventions, pharmacotherapy based on dominant symptoms, and scheduled patient clinical review, reappraisal, support, and guidance.

**General principles of IBS treatment.** All patients with IBS will benefit from lifestyle and dietary modifications, and this may be all that is required in those with mild or intermittent symptoms that do not affect quality of life. Key to long-term effective management of IBS is to provide patient reassurance of the initial diagnosis IBS and offer points of reassessment and reappraisal to establish a therapeutic relationship. Connecting patients with resources for diet, exercise, stress reduction, and psychological counseling is important. Screen for and treat any underlying sleep or mood disorder.

**Specific approaches based on IBS subtype.** There are three clinical phenotypes of IBS: diarrhea-predominant (IBS-D), constipation-predominant (IBS-C), and mixed pattern alternating diarrhea and constipation (IBS-M). Categorizing IBS by dominant GI symptom guides focused use of a few additional investigations (particularly in IBS-D), but also guides specific treatment approaches. Use of pharmaceuticals in IBS is generally reserved for those who have not adequately responded to dietary and lifestyle interventions, or in those with moderate or severe symptoms that impair quality of life.

Pain and bloating is a defining feature of IBS and, in some patients, these features are severe or frequent enough to affect quality of life. Antispasmodics may be beneficial in managing or aborting acute episodes of pain, and patients often take reassurance in having these on-demand treatments available. For chronic IBS pain, tricyclic antidepressants have shown benefit, and may have added benefits in those patients with mood or sleep issues.

All subtypes of IBS:

Aerobic exercise	Moderate to vigorous exercise for 20-60 minutes 3-5x per week
Soluble Fibre	Metamucil or Benefiber – slowly increase to 1-2 tbsp daily. May be beneficial in some but detrimental in others. Insoluble fibre like bran is not beneficial.
Diet	Consider sequential trials of low FODMAP diet, low lactose diet, and low gluten diet
Antispasmodics	Peppermint oil (e.g IBgard®) ( $\sim$ 0.2 mL caps, enteric coated) 2 capsules BID (\$20-90/mo.) Various other antispasmodics (hyoscyamine etc.) with limited evidence.
Complementary Therapies	Cognitive behavioral therapy (CBT) Mindfulness ( <a href="https://meditofoundation.org">https://meditofoundation.org</a> ; Medito app on smartphones)
Tricyclic antidepressants (TCAs)	Nortriptyline or amitriptyline 10-25 mg QHS, dose escalate by 10-25 mg/wk. May require 25-150 mg/d (\$20-60/mo.); usually takes 2-3 mos. for peak effect. Particularly useful in patients with diarrhea and pain predominance or sleep issues/anxiety/depression. May not be tolerated in IBS-C patients. Use with caution in patients at risk of prolonged QT; note somnolence and anticholinergic side effects. AGA IBS technical reviews do not endorse use of SSRIs.

### **IBS-D (Diarrhea-Predominant IBS):**

μ-Opioid receptor agonists	Loperamide (Imodium®) 2-4 mg BID (\$40-160/mo. OTC) Eluxadoline (Viberzi®) 75/100 mg daily (\$250/mo.). Minimal effect on abdominal pain but improves stool consistency. Contraindicated in patients with previous cholecystectomy, biliary obstruction, sphincter of Oddi dysfunction, excessive alcohol use, hx of pancreatitis, or other liver problems. Canadian availability uncertain.
Antibiotics	Rifaximin (Zaxine®) 550 mg 3x/daily for 2 weeks (\$386/2 weeks). More useful for pain and bloating than changing stool consistency. 20-25% discount cards available from Lupin Pharmaceuticals.
Bile acid binders	Cholestyramine powder (Olestyr®), OR colestipol (Colestid®) tablets or powder, OR colesevelam (Lodalis®) tablets or powder, each 1-4 g QHS. Especially useful post-cholecystectomy. Advise regarding timing with other medications to avoid interaction

### **IBS-C (Constipation-Predominant IBS):**

PEG laxatives	Mira-Lax® or Lax-a-Day® 17-34 g/d (\$25-50/mo.). May not help with pain.
Prokinetics	Plecanatide (Trulance®) 3 mg PO daily (\$185/mo.) Tenapanor (Ibsrela®) 50 mg PO BID (\$195/mo.) Linaclotide (Constella®) 290µg/d don't take with food, suggested timing 30 minutes before breakfast (\$195/mo.)

<sup>\*</sup>Costs from Walmart, including dispensing costs. Non-Costco/Walmart pharmacy is  $\sim 16\%$  increase on above. Do not need to be Costco member for pharmacy.

## 6. Additional resources for patients

UpToDate® – *Beyond the Basics* Patient Information about IBS (freely accessible) <a href="http://www.uptodate.com/contents/irritable-bowel-syndrome-beyond-the-basics?source=search\_result&search=ibs&selectedTitle=2%7E150">http://www.uptodate.com/contents/irritable-bowel-syndrome-beyond-the-basics?source=search\_result&search=ibs&selectedTitle=2%7E150</a>

#### 7. Additional resources for clinicians

AGA Clinical Practice Guideline on the Pharmacological Management of IBS With Constipation <a href="https://www.gastrojournal.org/article/S0016-5085(22)00390-0/fulltext">https://www.gastrojournal.org/article/S0016-5085(22)00390-0/fulltext</a>

AGA Clinical Practice Guideline on the Pharmacological Management of IBS With Diarrhea <a href="https://www.gastrojournal.org/article/S0016-5085(22)00391-2/fulltext">https://www.gastrojournal.org/article/S0016-5085(22)00391-2/fulltext</a>

Wilkins *et al.* Diagnosis and management of IBS in adults. American Family Physician 2012;86:419-426 <a href="http://www.aafp.org/afp/2012/0901/p419.html">http://www.aafp.org/afp/2012/0901/p419.html</a>

### 7. Clinical flow diagram

Our Enhanced Primary Care Pathway is adapted from *Alberta Primary Care Network*, incorporating the most current evidence-based clinical guidelines for diagnosis and management of IBS, from both Gastroenterology and Primary Care literature.

