Primary Care Management Pathway
Gastroesophageal Reflux Disease

Background

Primary care management pathways are being developed by specialist and primary care groups to support the management of common, non-urgent conditions for which long wait times to specialty care currently exist. The pathways will help identify patients with high-risk features and facilitate early referral to specialists as needed.

Gastroesophageal reflux disease (GERD) is a common symptom and continues to be one of the most common diseases seen by gastroenterology and primary care physicians. Once diagnosed the mainstay of treatment is lifestyle modification, followed by acid-suppression therapy depending on severity of symptoms. The majority of these patients can be managed in the primary care home. The goal of this pathway is to provide guidance on helping patients to manage their symptoms and identify those who have signs or symptoms that may require more urgent GI assessment or endoscopic evaluation.

Defining condition and/or other important definitions

Gastroesophageal reflux is a normal physiological phenomenon. However, it can become pathologic if it causes esophageal injury or produces symptoms that are troublesome to the patient, with the most common being typical heartburn/regurgitation. Some patients may have atypical symptoms of GERD, including chest pain, laryngitis, throat clearing and chronic cough, which can be more difficult to establish GERD as the cause of these extraesophageal symptoms.

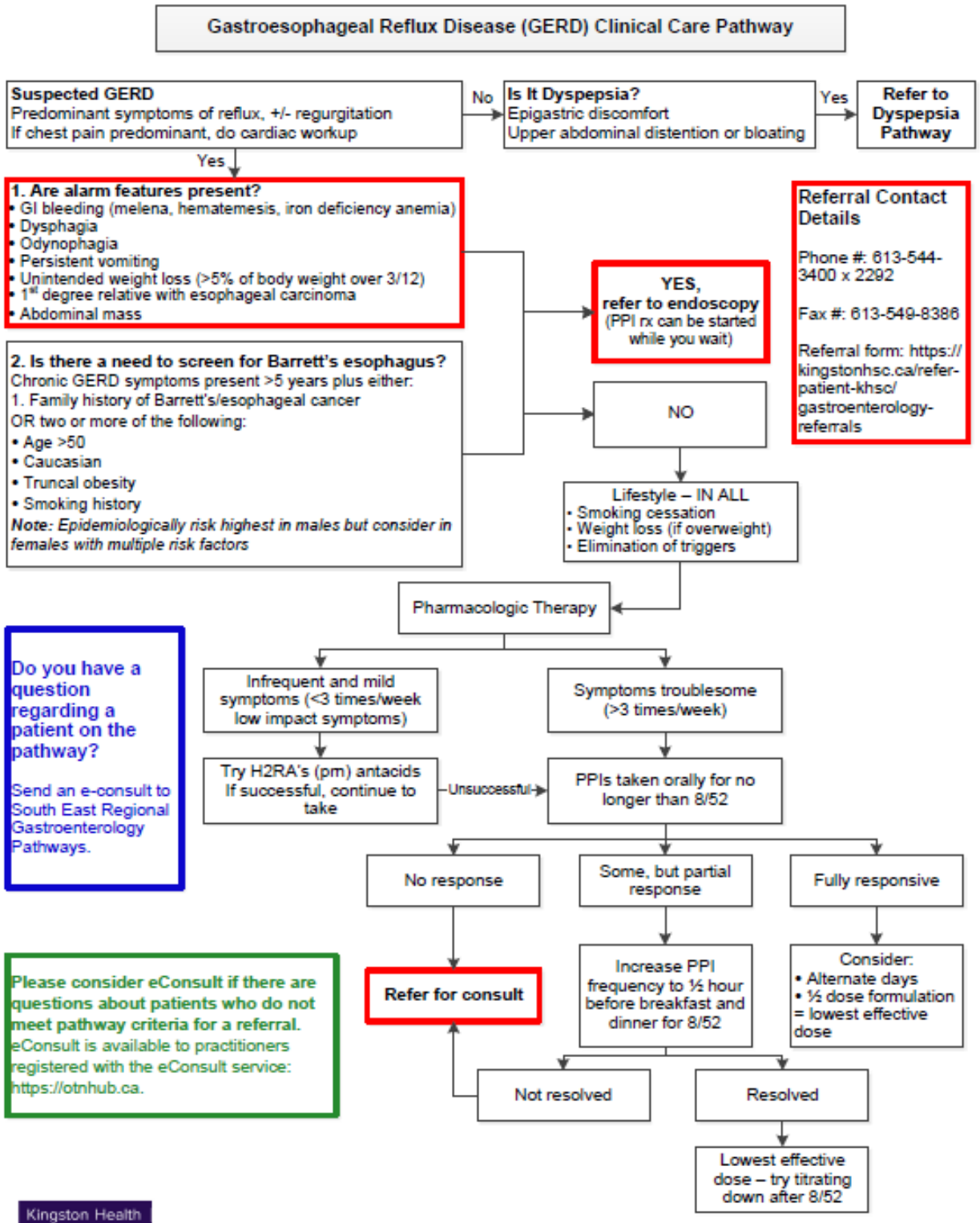
There is no gold standard for the diagnosis of GERD. It is based on a combination of symptom presentation, response to therapy, and if appropriate endoscopic findings or pH testing. Most consensus guidelines recommend a trial of acid-suppressing therapy as a trial in patients with typical symptoms of GERD.

Chest pain can be a symptom of GERD but **all patients should have a cardiac cause excluded** before a GI etiology is pursued. Once a cardiac etiology for chest pain has been excluded then further GI investigations can be considered.

Patient information

It is possible that your patient and/or their family member may express a desire for additional information about the primary care management pathway and their role or experience throughout the process of being on a pathway. Additional information for patient education has been provided in “Appendix B – Patient Information”.

Primary Care Management Pathway – Clinical Flow Diagram
Gastroesophageal Reflux Disease (GERD)



Appendix A – Expanded Detail

Suspected GERD

Patients with typical symptoms of heart burn and/or regurgitation can be diagnosed with GERD. Some patients may have a wider spectrum of symptoms, including dysphagia, globus sensation, water brash, and nausea.

Patients with suspected GERD who have chest pain as a predominant feature should have cardiac causes excluded prior to pursuing further GI investigations or referral. GERD treatment can be started while cardiac investigations are ongoing.

Is it Dyspepsia?

If patients have symptoms that are predominantly epigastric pain and/or upper abdominal bloating, **refer to the Dyspepsia pathway** for further guidance.

Are Alarm Features Present?

If any of the following features are present, patient should be referred direct to endoscopy with the attached referral form.

- GI bleeding (melena, hematemesis, iron deficiency anemia)—if yes do CBC, INR, urea and ferritin as part of referral
- Dysphagia
- Odynophagia
- Persistent vomiting
- Unintended weight loss (>5% over 3 months)
- 1st degree relative with esophageal carcinoma
- Abdominal mass

Do We Need to Screen for Barrett's?

Screening for Barrett's esophagus should be considered in:

- Patients with **uncontrolled GERD** (defined as symptoms 3 or more times per week) for **>5 years plus family history** of esophageal cancer or Barrett's esophagus

OR

- Patients with **uncontrolled GERD** for >5 years **plus at least two of the risk factors below**:
    - Age>50
    - Caucasian
    - Truncal obesity
    - Smoking history

These recommendations are based on consensus recommendations of expert opinion after critical review of available literature. Females are considered to be lower risk for esophageal cancer (compared to males) and some guidelines do not recommend routine screening in this population. However if multiple risk factors are present then screening should be considered.

Before screening is performed, patient's overall life expectancy should be considered, and subsequent implications, including need for periodic surveillance and potential therapy should be discussed with patient.

Non-Pharmacologic Therapy

- Smoking cessation
- Weight loss in patients who are overweight or if they have recently gained weight
- Elimination of food triggers
    - Coffee
    - Caffeinated beverages
    - Alcohol
    - Spicy/greasy/acidic foods
    - Chocolate
    - Mint
- If symptoms are nocturnal avoid eating at least 3 hours before bed and avoid lying down after eating
- Elevate head of bed 4-6 inches using foam wedges or blocks. An extra pillow is not sufficient.

Pharmacologic Therapy

H2-Receptor Antagonists	• Mechanism of action: Blocks histamine receptor which inhibits action of proton pump which prevents movement of hydrogen ions into the stomach • Efficacy may be limited by tachyphylaxis after a few weeks • Place in treatment: Can be used for patients with mild and infrequent symptoms (<2x/week). Can provide rapid, on demand symptom relief. Can also be added to patients with night time reflux symptoms, in addition to daytime PPI therapy, if needed. • Agents: ranitidine, famotidine
Antacids	• Place in therapy: on demand for infrequent reflux symptoms. Effect is shorter duration than H2RAs (on average 1.5 hrs) • Adverse reactions: Magnesium containing antacids can cause diarrhea. Calcium containing antacids can cause constipation. Caution in patients with renal disease • Agents: ○ Calcium salts (most potent): Rolaids, tums ○ Sodium bicarbonate: Alka seltzer ○ Magnesium salts: Milk of magnesia ○ Aluminum salts (least potent): Gaviscon
Proton Pump Inhibitors	• Mechanism of action: Inhibits the parietal cell H+/K+ ATP pump which suppresses gastric acid secretion • Initial treatment should be once daily, 30 min before breakfast • If response is inadequate after 8 weeks, step up treatment to twice daily or switch to a different PPI • If symptoms are controlled then recommend titrating dose down to lowest effective dose. Should attempt to either taper or stop PPI use once per year. ○ **NOTE: Patients with Barrett's esophagus should remain on lifetime PPI regardless of whether symptoms resolve**

	• Agents available:
	  ○ Pantoprazole 40mg
	  ○ Rabeprazole 20mg
	  ○ Omeprazole 20mg
	  ○ Esomeprazole 40mg
	  ○ Lansoprazole 30mg
	  ○ Dexlansoprazole 30mg
	
	• Nonadherence to PPI use is common. If ongoing symptoms, confirm they are taking on a daily basis, at least 30 minutes before breakfast. If on twice daily dosing, second dose should be at least 30 minutes before supper meal.
	
	• Patients with persistent symptoms despite adherence to medication should be referred for consultation for consideration for endoscopy and/or pH/impedance reflux monitoring to discern GERD from non-GERD etiologies

When Should I Refer my Patient to a Specialist?

1. **If alarm features are present**
2. **If patients meet criteria to screen for Barrett's esophagus**
3. **If patient has inadequate response to PPI therapy, after compliance and adherence has been confirmed**

Appendix B – Patient Information

Please note: This information is intended to be given to the patient, either as a handout or in the form of a conversation with their primary care provider.

What is gastroesophageal reflux disease (GERD)?

- Acid reflux is when acid moves from the stomach up the esophagus, the tube that connects the stomach to the throat
- This can cause an acid taste in the mouth or burning the chest, also known as heartburn
- It is caused by an unwanted relaxation of the muscle that closes off the esophagus from the stomach
- It is most often cared for by the primary care team

What lifestyle changes can I make to help my symptoms?

- Identify foods that cause symptoms and try to eliminate or avoid them
    - Spicy foods, fatty foods, coffee, chocolate, mint, acidic foods (i.e. tomatoes, citrus)
- Eat smaller meals throughout the day
- Weight loss, if needed
- Stop or reduce alcohol, tobacco and caffeine
- Wait 2-3 hrs after you eat before you lie down
- Raise the head of the bed 4-6 inches with blocks or foam wedge if symptoms occur at night

What tests may need to be done?

- Tests are rarely needed
- Some people who have had uncontrolled GERD for more than 5 years may require screening for Barrett's esophagus if other criteria are met

Tell your health care provider if you have the following symptoms:

- Trouble swallowing or painful swallowing
- Black, tarry stool
- Family history of gastric or esophageal cancer
- Vomiting that doesn't stop
- Vomiting with blood
- Unintentional weight loss
- Lump in stomach area

Medication that may be tried

- Prescription acid blockers or nonprescription antacids may be tried. Discuss with your health care provider to help select the most appropriate medication.

Additional Resources

General information on GERD
https://cdhf.ca/digestive-disorders/gerd/what-is-gastroesophageal-reflux-disease-gerd/

Patient Education: GERD in Adults (Beyond the Basics)
https://www.uptodate.com/contents/gastroesophageal-reflux-disease-in-adults-beyond-the-basics

Acid Reflux—American College of Gastroenterology (ACG)
https://gi.org/topics/acid-reflux/

Appendix C – Endnotes

Choosing Wisely Canada. Bye-Bye, PPI: A toolkit for deprescribing proton-pump inhibitors in EMR-enabled primary care settings. 2019. https://choosingwiselycanada.org/wp-content/uploads/2017/07/CWC_PPI_Toolkit_v1.2_2017-07-12.pdf

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Katz P et al. ACG clinical guidelines for the diagnosis and management of gastroesophageal reflux disease. *American Journal of Gastroenterology*. (2022) 117:27-56

Qumseya B et al. ASGE guidelines on screening and surveillance of Barrett's esophagus. *Gastrointestinal Endoscopy.* (2019) 90:335-359

Shaheen N et al. AGA clinical guideline: diagnosis and management of Barrett's esophagus. *American Journal of Gastroenterology.* (2016) 111:30-50