

GERD Primary Care Pathway

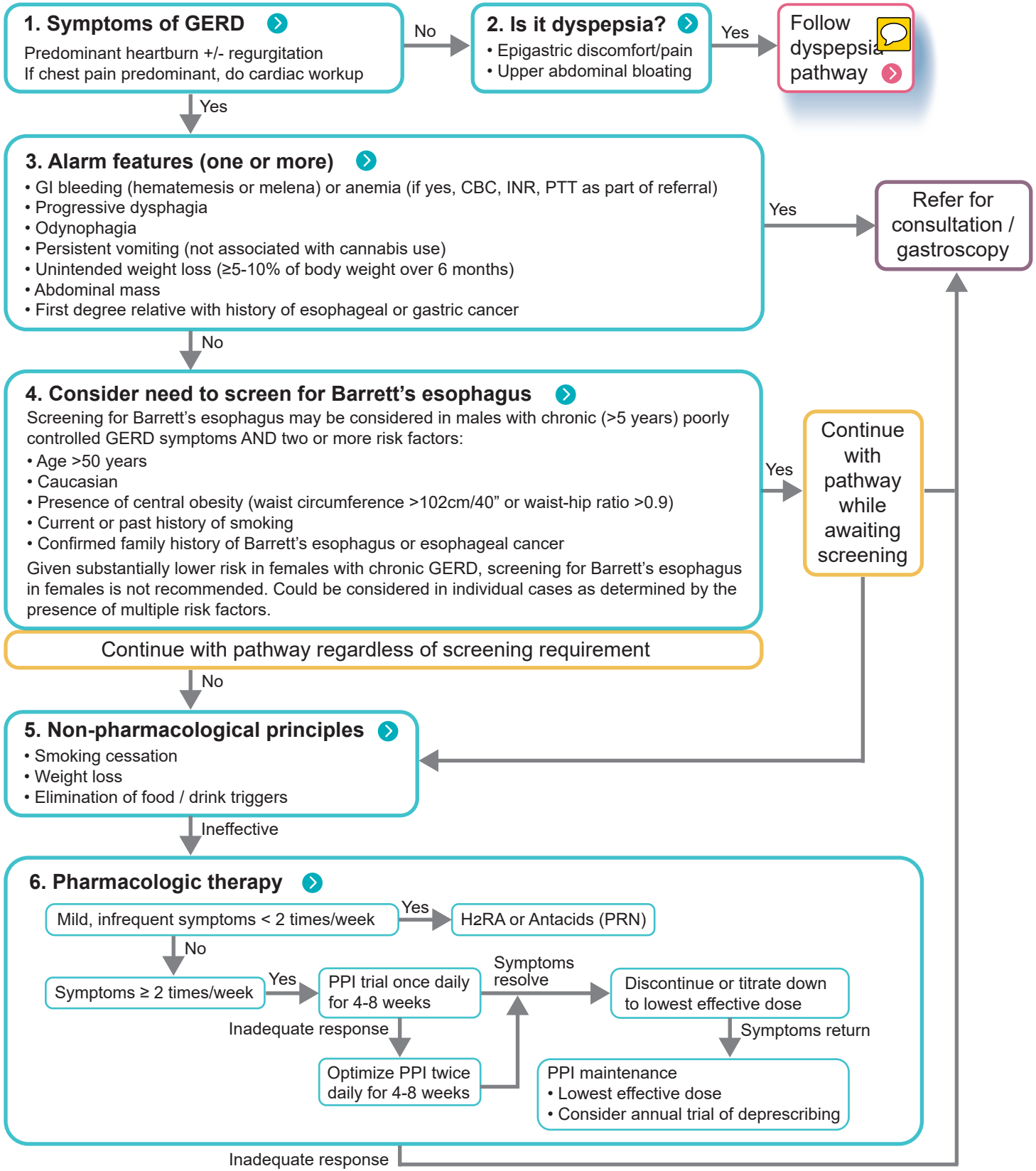
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GERD PRIMER

- The reflux of gastric contents into the esophagus is a normal physiological phenomenon.
 - Reflux is deemed pathological when it causes esophageal injury or produces symptoms that are troublesome to the patient (typically heartburn and/or regurgitation) -- a condition known as gastroesophageal reflux disease (GERD).
- A diagnosis of GERD can be made in patients with any of the clinical symptoms described above (without alarm features). Generally, no investigations are required as part of the initial workup.
- Treatment at the primary care level is focused on lifestyle, smoking cessation, dietary modifications to avoid GERD triggers and achieve a healthy body weight, and optimal use of proton pump inhibitors (PPI), if needed.
- Screening for *H. pylori* is not recommended in GERD. Most patients with GERD do not have *H. pylori* and will have improvement or resolution of symptoms through lifestyle and dietary modifications or when treated with a PPI or H₂RA.
- Endoscopy is warranted in patients presenting with dysphagia or other alarm features and in those refractory to adequate initial and optimized PPI treatments. Esophageal pH or impedance-pH reflux monitoring studies are sometimes arranged by GI after endoscopy.
- GERD can be complicated by Barrett's esophagus, esophageal stricture, and, rarely, esophageal cancer.

EXPANDED DETAILS

1. Symptoms of GERD

- A diagnosis of GERD can be made in patients with predominant symptoms of heartburn and/or regurgitation.
- In some patients, GERD has a wider spectrum of symptoms including chest pain, dysphagia, globus sensation, odynophagia, nausea, and water brash.
- If patients with suspected GERD have chest pain as a dominant feature, cardiac causes should first be excluded. GERD treatment can be started while doing cardiac investigations.

2. Is it dyspepsia?

- If the patient's predominant symptom is epigastric pain and/or upper abdominal bloating, please refer to the Dyspepsia pathway (albertahealthservices.ca/assets/about/scn/ahs-scn-dh-pathway-dyspepsia.pdf)

3. Alarm features (warranting consideration of referral for consultation and/or endoscopy)

- GI bleeding (hematemesis or melena – see primer on black stool on page 3) or anemia (if yes, complete CBC, INR, PTT as part of referral)
- Progressive dysphagia
- Odynophagia
- Persistent vomiting (not associated with cannabis use)
- Unintended weight loss ($\geq 5-10\%$ of body weight over 6 months)
- Abdominal mass



Primer on Black Stool

- Possible causes of black stool
 - Upper GI bleeding
 - Slow right-sided colonic bleeding
 - Epistaxis or hemoptysis with swallowed blood
- Melena is dark/black, sticky, tarry, and has a distinct odour
- Patient history should include:
 - Any prior GI bleeds or ulcer disease
 - Taking ASA, NSAIDs, anticoagulants, Pepto Bismol, or iron supplements
 - Significant consumption of black licorice
 - Significant alcohol history or hepatitis risk factors
 - Any other signs of bleeding (e.g. coffee ground emesis, hematemesis, hematochezia, or bright red blood per rectum)
 - Any dysphagia, abdominal pain, change in bowel movements, constitutional symptoms or signs/symptoms of significant blood loss
- Physical exam should include vitals (including postural if worried about GI bleeding) and a digital rectal exam for direct visualization of the stool to confirm, in addition to the remainder of the exam
- Initial labs to consider include CBC, BUN (may be elevated with upper GI bleeding), INR
- If the patient is actively bleeding, suggest calling GI on call and/or the ED for assessment, possible resuscitation, and possible endoscopic procedure.

4. Consider need to screen for Barrett's esophagus

- Males with long-term (>5 years) poorly controlled GERD may be considered for a referral for screening for Barrett's esophagus, but only if at least two risk factors are present:
 - Age >50 years
 - Caucasian
 - Presence of central obesity (waist circumference > 102cm/40" or waist -hip ratio > 0.9)
 - Current or past history of smoking
 - Confirmed family history of Barrett's esophagus or esophageal cancer
- Females with chronic GERD have a substantially lower risk of esophageal cancer (when compared with males), and therefore screening for Barrett's esophagus in females is not recommended. Screening could be considered in individual cases as determined by the presence of multiple risk factors as per above.
 - For females, central obesity = waist circumference > 88 centimetres/35 inches or waist-hip ratio > 0.8).
- Before screening is performed, the overall life expectancy of the patient should be considered, and subsequent implications, such as the need for periodic endoscopic surveillance and therapy, if BE with dysplasia is diagnosed, should be discussed with the patient.

5. Non-pharmacological principles of GERD management (see [Patient Resources](#))

- Smoking cessation is essential.
- Weight loss in patients who are overweight or who have recently gained weight (even if at a normal BMI).
- Elimination of GERD triggers including alcohol, caffeine, carbonated beverages, chocolate, mint, and spicy/fatty/acidic foods, is reasonable but is not supported by clear evidence of physiological or clinical improvement of GERD.
- Avoid meals three hours before bedtime for patients with nocturnal GERD.



- Consider elevating the head of bed 4-6 inches, using blocks or foam wedges. An extra pillow for sleeping is not sufficient.

6. Pharmacologic therapy

- If symptoms are mild and infrequent (<2 times per week), histamine H₂-receptor agonists or antacids (Ca/Mg/Al salts) are recommended. These provide rapid on-demand relief of heartburn and avoid prematurely committing some patients to long-term use of PPI.
- If symptoms are ≥ 2 times per week, a trial of PPI is recommended.
- Initial PPI therapy should be once daily, 30 minutes before breakfast on an empty stomach.
 - If there is inadequate response after 4-8 weeks, step up to BID dosing for another 4-8 weeks.
 - If symptoms are controlled, it is advisable for most patients to titrate the PPI down to the lowest effective dose and attempt once yearly to taper or stop PPI use.
 - **NOTE:** patients with Barrett's esophagus require lifetime daily PPI, regardless of whether symptoms continue.
- PPI deprescribing resources are available on the Digestive Health Strategic Clinical Network (DHSCN) website (poster (albertahealthservices.ca/assets/about/scn/ahs-scn-dh-ppi-patient-poster.pdf), guideline (albertahealthservices.ca/assets/about/scn/ahs-scn-dh-ppi-guideline.pdf), co-decision making tool for patients and health care providers (albertahealthservices.ca/assets/about/scn/ahs-scn-dh-ppi-decision-tool.pdf)).
- There are no major differences in efficacy between PPIs.

PPI	Dosage	Estimated 90-day cost (2019) ¹	Coverage ²
Rabeprazole	10mg	\$20	Covered by Blue Cross/non-insured health benefits
Pantoprazole	40mg	\$30	Covered by Blue Cross/non-insured health benefits
Omeprazole	20mg	\$35	Covered by Blue Cross/non-insured health benefits
Lansoprazole	30mg	\$60	Covered by Blue Cross/non-insured health benefits
Dexlansoprazole	30mg	\$230	Not covered by Blue Cross/non-insured health benefits
Esomeprazole	40mg	\$200	Not covered by Blue Cross/non-insured health benefits

- It is estimated that 1/3 of patients with GERD will not adequately respond to PPI. Factors that predict PPI failure include obesity, poor adherence to PPI treatment, and psychological factors.
 - Patient non-adherence to treatment with PPI is common. Confirm that the patient has taken the intended dose of PPI on a daily basis, 30 minutes before breakfast.
- Patients with persistent, troublesome GERD symptoms, in spite of optimized use of PPI, should be referred for diagnostic evaluation (endoscopy ± pH/impedance reflux monitoring) to discern GERD from non-GERD etiologies.

BACKGROUND

About this Pathway

- Digestive health primary care pathways were originally developed in 2015 as part of the Calgary Zone's Specialist LINK initiative. They were co-developed by the Department of Gastroenterology and the Calgary Zone's specialty integration group, which includes medical leadership and staff from Calgary and area Primary Care Networks, the Department of Family Medicine and Alberta Health Services.
- The pathways were intended provide evidence-based guidance to support primary care providers in caring for patients with common digestive health conditions within the medical home.
- Based on the successful adoption of the primary care pathways within the Calgary Zone, and their impact on timely access to quality care, in 2017 the Digestive Health Strategic Clinical Network led an initiative to

¹ Maximum Allowable Cost pricing paid by Alberta government sponsored drug programs. Cost and coverage information as reported in the Alberta College of Family Physicians publication "Price Comparison of Commonly Prescribed Pharmaceuticals in Alberta in 2019" found at acfp.ca/wp-content/uploads/2019/02/ACFPPricingDoc2019.pdf.

² Drug plans will only pay the cost of rabeprazole 10mg for low dose PPI and will only pay the cost of pantoprazole for high dose PPI.



validate the applicability of the pathways for Alberta and to spread availability and foster adoption of the pathways across the province.

Authors & Conflict of Interest Declaration

This pathway was reviewed and revised under the auspices of the Digestive Health Strategic Clinical Network in 2019, by a multi-disciplinary team led by family physicians and gastroenterologists. For more information, contact the DHSCN at 780-735-1448.

Pathway Review Process

Primary care pathways undergo scheduled review every three years, or earlier if there is a clinically significant change in knowledge or practice. The next scheduled review is April 2022. However, we welcome feedback at any time. Please call 780-735-1448 to share your comments.

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Disclaimer

This pathway represents evidence-based best practice but does not override the individual responsibility of health care professionals to make decisions appropriate to their patients using their own clinical judgment given their patients' specific clinical conditions, in consultation with patients/alternate decision makers. The pathway is not a substitute for clinical judgment or advice of a qualified health care professional. It is expected that all users will seek advice of other appropriately qualified and regulated health care providers with any issues transcending their specific knowledge, scope of regulated practice or professional competence.

PROVIDER RESOURCES

Advice Options

Non-urgent advice is available to support family physicians.

- Gastroenterology advice is available across the province via Alberta Netcare eReferral Advice Request (responses are received within five calendar days). Visit albertanetcare.ca/documents/Getting-Started-Advice-Requests-FAQs.pdf for more information.
- Non-urgent telephone advice connects family physicians and specialists in real time via a tele-advice line. Family physicians can request non-urgent advice from a gastroenterologist:
 - In the Calgary Zone at specialistlink.ca or by calling 403-910-2551. This service is available from 8:00 a.m. to 5:00 p.m., Monday to Friday (excluding statutory holidays). Calls are returned within one (1) hour.
 - In the Edmonton Zone by calling 1-844-633-2263 or visiting pcnconnectmd.com. This service is available from 8:00 a.m. to 6:00 p.m., Monday to Friday (excluding statutory holidays and Christmas break). Calls are returned within two (2) business days.



Resources and References

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Resources for appropriate PPI prescribing. Alberta Health Services – Digestive Health Strategic Clinical Network website. <ul style="list-style-type: none">• PPI guideline albertahealthservices.ca/assets/about/scn/ahs-scn-dh-ppi-guideline.pdf• PPI co-decision making tool albertahealthservices.ca/assets/about/scn/ahs-scn-dh-ppi-decision-tool.pdf• PPI patient poster albertahealthservices.ca/assets/about/scn/ahs-scn-dh-ppi-patient-poster.pdf
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PATIENT RESOURCES

Information

Description	Website
General information on GERD (MyHealth.Alberta.ca)	myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=hw99177
General information on GERD (Canadian Digestive Health Foundation)	cdhf.ca/digestive-disorders/gerd/what-is-gastroesophageal-reflux-disease-gerd/
General information on GERD (UpToDate® – <i>Beyond the Basics</i> Patient information)	uptodate.com/contents/acid-reflux-gastroesophageal-reflux-disease-in-adults-beyond-thebasics?source=search_result&search=GERD+beyond+the+basics&selectedTitle=2~150
General information on weight management (MyHealth.Alberta.ca)	myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=center1038
Online learning module on weight management (MyHealth.Alberta.ca)	myhealth.alberta.ca/learning/modules/Weight-Management
Resources on healthy eating (Alberta Health Services)	albertahealthservices.ca/nutrition/Page11115.aspx

Services available

Description	Website
Services for patients with chronic conditions, including how to achieve a healthy weight (Alberta Healthy Living Program - AHS)	albertahealthservices.ca/info/page13984.aspx
Supports to quit smoking (Alberta Quits)	albertaquits.ca
Supports for working towards healthy lifestyle goals and weight management (Weight Management – AHS)	albertahealthservices.ca/info/Page15163.aspx

