Esophageal Cancer Early Detection & Prevention Pathway Map
Version 2019.05

Disclaimer
The pathway map is intended to be used for informational purposes only. The pathway map is not intended to constitute or be a substitute for medical advice and should not be relied upon in any such regard. Further, all pathway maps are subject to clinical judgment and actual practice patterns may not follow the proposed steps set out in the pathway map. In the situation where the reader is not a healthcare provider, the reader should always consult a healthcare provider if he/she has any questions regarding the information set out in the pathway map. The information in the pathway map does not create a physician-patient relationship between Cancer Care Ontario (CCO) and the reader.
Pathway Map Preamble

Patients who present with signs or symptoms suspicious of Barrett’s esophagus.

Pathway Map Considerations

- Primary care providers play an important role in the cancer journey and should be informed of relevant tests and consultations. Ongoing care with a primary care provider is assumed to be part of the pathway. For patients who do not have a primary care provider, Health Care Connect, is a government resource that helps patients find a doctor or nurse practitioner.
- Throughout the pathway, a shared decision-making model should be implemented to enable and encourage patients to play an active role in the management of their care. For more information see Person-Centered Care Guideline and EBS #19-2: Provider-Patient Communication.
- Hyperlinks are used throughout the pathway to provide information about relevant CCO tools, resources and guidance documents.
- The term ‘health care provider’, used throughout the pathway, includes primary care providers, specialists, nurse practitioners, and emergency physicians.
- For more information on the Diagnostic Assessment Program (DAP) refer to the Organizational Standards for DAPs.
- Psychosocial oncology (PSO) is the interprofessional specialty concerned with understanding and treating the social, practical, psychological, emotional, spiritual, and functional needs and quality-of-life impact that cancer has on patients and their families. Psychosocial care should be considered an integral and standardized part of cancer care for patients and their families at all stages of the illness trajectory. For more information, visit EBS #19-3.
- Counseling and treatment for smoking cessation should be initiated early on in the pathway and continued by care providers throughout the pathway as necessary.

Note: EBS #19-2 and EBS #19-3 is older than 3 years and is currently listed as ‘For Education and Information Purposes’. This means that the recommendations will no longer be maintained but may still be useful for academic or other information purposes.

Pathway Map Legend

- **Primary Care**
- **Palliative Care**
- **Pathology**
- **Surgery**
- **Radiation Oncology**
- **Medical Oncology**
- **Radiology**
- **Multidisciplinary Cancer Conference (MCC)**
- **Endoscopy/Gastroenterology**
- **Psychosocial Oncology (PSO)**

**Colour Guide**

- **Shape Guide**
  - **Intervention**
  - **Decision or assessment point**
  - **Patient (disease) characteristics**
  - **Consultation with specialist**
  - **Exit pathway**
  - **Off-page reference**
  - **Patient/Provider interaction**
  - **Referral**
  - **Wait time indicator point**

**Line Guide**

- **Required**
- **Possible**

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Pathway Map Disclaimer

This pathway map is a resource that provides an overview of the treatment that an individual in the Ontario cancer system may receive.

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### Esophageal Cancer Early Detection & Prevention Pathway Map

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#### Suspection and Diagnosis

**Visit to Health Care Provider**

**Patient presents a history of a daily heartburn ≥ 10 years. Screening may be considered in men with chronic (>5 years) and/or frequent (weekly or more) symptoms of GERD and two or more risk factors including:**

- Age >50 years
- Caucasian
- Central obesity (waist circumference >102cm or waist-hip ratio >0.9)
- History of smoking
- Confirmed family history (1st degree relative)

Consensus from Working Group, ASGE & AGA Guidelines

**Endoscopist**

Counselling regarding non-prescription strategies and lifestyle modifications to reduce reflux

Counelling regarding non-prescription strategies and life style modifications to reduce reflux

#### Proton Pump Inhibitor (PPI)

**Once daily**

**Endoscopy**

Repeat 8-12 weeks

**Pathology**

* Esophagastroduodenoscopy (EGD) + Biopsy

1. PPI Clinical Guideline: 2015
2. Biopsy protocol: 4-quadrant biopsies (every 2cm) and biopsy of any visible nodules.

### ESOPHAGUS

- No Barrett's esophagus; less than esophagitis grade B
- Follow-up with primary health care provider

**Smoking Cessation Program**

**Smoking cessation counselling & intervention where appropriate**

1. Age >50 years
2. Caucasian
3. Central obesity (waist circumference >102cm or waist-hip ratio >0.9)
4. History of smoking
5. Confirmed family history (1st degree relative)

**Proton Pump Inhibitor (PPI)**

**Once daily**

**Endoscopy**

Repeat 8-12 weeks

**Counselling regarding non-prescription strategies and life style modifications to reduce reflux**

**Dietitian**

**Results**

**Barrett's esophagus**

**Endoscopy**

Repeat 8-12 weeks

**Counselling regarding non-prescription strategies and life style modifications to reduce reflux**

**Screen for psychosocial needs, and assessment and management of symptoms. Click here for more information about symptom assessment and management tools**

**Consider integrating the palliative care approach early and across the cancer journey. Click here for more information about palliative care**
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Screen for psychosocial needs, and assessment and management of symptoms. Click here for more information about symptom assessment and management tools.

Consider integrating the palliative care approach early and across the cancer journey. Click here for more information about palliative care.

Pathology

Endoscopic resection and ablation

Surveillance can be considered up to the age of 80 or until patient health precludes ongoing surveillance and treatment of neoplasia.


Once all visible lesions are resected, surveillance may be appropriate in patients with persistent dysplasia following curative intent endoscopic resection and ablation.

Secondary review should be performed by a pathologist with special interest in GI cancer.

Eosophageal Cancer Early Detection & Prevention Pathway Map

No Cancer or dysplasia

Indefinite Dysplasia

Optimize PPI

Repeat EGD in 3-6 months + Biopsy

Pathology

Low Grade Dysplasia

Endoscopic Surveillance (every 6-12 months)¹

EGD + Biopsy²

Pathology

For complete eradication of Barrett’s consider:

Endoscopic Resection (ER)²

And/or

Radiofrequency Ablation (RFA)²

High Grade Dysplasia

For complete eradication of Barrett’s consider:

ER²

And/or

RFA²

Multifocal High Grade Dysplasia

For complete eradication of Barrett’s consider:

ER²

And/or

RFA²

Cancer

No Dysplasia

Endoscopic Surveillance (every 3-5 years)²

EGD + Biopsy²

Pathology

Optimized PPI and consider Aspirin²

Surgeon

Consider Fundoplication

Surveillance Protocol (every year)²

EGD + Biopsy²

Pathology

Optimized PPI and consider Aspirin²

Surgeon

Consider Fundoplication

Surveillance² (frequency may vary based on results and is determined by the treating physician)

EGD + Biopsy²

Pathology

Optimized PPI and consider Aspirin²

Surgeon

Esophagectomy² (frequency may vary based on results and is determined by the treating physician)

EGD + Biopsy²

Pathology

Optimized PPI and consider Aspirin²

Thoracic Surgeon

Esophagectomy²

Pathology

Surveillance

Proceed to Esophageal Cancer Diagnosis Map (Page 4).
Screen for psychosocial needs, and assessment and management of symptoms. Click here for more information about symptom assessment and management tools

Consider integrating the palliative care approach early and across the cancer journey. Click here for more information about palliative care

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**Esophageal Cancer Early Detection & Prevention Pathway Map**

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From *Pathway Map – Clinical Stage IA (Page 3)*:

- **Endoscopic Resection (ER)**
  - Pathology
  - Complete resected?
    - Yes
      - Results
      - No dysplasia
      - Optimize PPI
      - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months
      - Dysplasia
      - Indefinite dysplasia
      - Pathology
      - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months
    - No
      - Repeat ER
      - Nodule
      - Barrett's esophagus
      - Flat
      - Results
      - No dysplasia
      - Pathology
      - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months
      - Dysplasia
      - Indefinite dysplasia
      - Pathology
      - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months
      - Cancer
      - Pathology
      - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months

**Surveillance Protocol**

- (every 3-5 years)
  - EGD + Biopsy\(^{\circledast}\)
  - Pathology
  - No dysplasia
  - Indefinite dysplasia
  - Pathology
  - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months
  - Dysplasia
  - Indefinite dysplasia
  - Pathology
  - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months

**Optimized PPI and consider Aspirin\(^{\circledast}\)**

**Return to results on Page 3**

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**From Page 3 of Diagnosis Pathway Map (Page 4)**

- **Surveillance Protocol**
  - (every year)
  - EGD + Biopsy\(^{\circledast}\)
  - Pathology
  - No dysplasia
  - Indefinite dysplasia
  - Pathology
  - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months

**Optimized PPI and consider Aspirin\(^{\circledast}\)**

**Surveillance Protocol**

- (every 3-5 years)
  - EGD + Biopsy\(^{\circledast}\)
  - Pathology
  - No dysplasia
  - Indefinite dysplasia
  - Pathology
  - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months

**Optimized PPI and consider Aspirin\(^{\circledast}\)**

**Proceed to page 5**

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**B**

**Proceed to page 5**

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**A**

**From Page 3 of Diagnosis Pathway Map (Page 4)**

- **Surveillance Protocol**
  - (every 3-5 years)
  - EGD + Biopsy\(^{\circledast}\)
  - Pathology
  - No dysplasia
  - Indefinite dysplasia
  - Pathology
  - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months

**Optimized PPI and consider Aspirin\(^{\circledast}\)**

**Surveillance Protocol**

- (every year)
  - EGD + Biopsy\(^{\circledast}\)
  - Pathology
  - No dysplasia
  - Indefinite dysplasia
  - Pathology
  - Repeat EGD + Biopsy\(^{\circledast}\) in 3-6 months

**Optimized PPI and consider Aspirin\(^{\circledast}\)**

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\(^{\circledast}\)Biopsy protocol: 4-quadrant biopsies (every 2cm) and biopsy of any visible nodules.\(^{\circledast}\)Biopsy protocol: 4-quadrant biopsies (every 1cm) and biopsy of any visible nodules.\(^{\circledast}\)High-dose PPI and consider aspirin chemoprevention therapy is recommended. Jankowski JAZ, de Caestecker J, Love SB et al. (2018). Esomeprazole and aspirin in Barrett's oesophagus (AspECT): a randomised factorial trial. Lancet; 392, 400-08.