

The Role of Endoscopic Ultrasound in the Management of Patients with Barrett's Esophagus and Superficial Neoplasia



Bashar J. Qumseya, MD, MPH^a, Herbert C. Wolfsen, MD^{b,*}

KEYWORDS

• Endoscopy • Esophageal cancer • Advanced imaging • Endosonography

KEY POINTS

- Endoscopic ultrasound (EUS) is safe and widely available.
- Evidence suggests that EUS can accurately change the management strategy in 14% of patients referred for evaluation of Barrett neoplasia.
- EUS has suboptimal specificity and a high rate of overstaging early tumors.
- EUS is especially useful to exclude advanced disease and nodal involvement.
- Cost-effectiveness of EUS for this indication has not been established.

INTRODUCTION

Esophageal adenocarcinoma (EAC) continues to be a major cause of cancer mortality in Western populations. The incidence of EAC seems to be increasing.^{1–3} Although several risk factors have been identified for EAC, Barrett esophagus (BE), which is intestinal metaplasia of squamous esophageal mucosa, is the only treatable factor. The risk of progression to EAC among patients with BE varies by degree to dysplasia.⁴ As with most cancers, local staging of neoplasia is of critical importance and dictates treatment options and patient outcomes. The current staging of EAC follows the TNM staging (**Table 1**).⁵ Superficial cancers are those arising in the mucosa (T1m) or submucosa (T1sm). Current practice includes endoscopic mucosal resection (EMR) or endoscopic submucosal dissection (ESD) for patients with superficial neoplasia (T1m) and some

Disclosure Statement: Dr. H.C. Wolfsen receives research funding from NinePoint Medical.

^a Division of Gastroenterology and Hepatology, Archbold Medical Group, Florida State University, 112 Mimosa Drive, Thomasville, GA 31792, USA; ^b Division of Gastroenterology and Hepatology, Mayo Clinic, 4500 San Pablo Road, Jacksonville, FL 32224, USA

* Corresponding author.

E-mail address: herbert.wolfesen@mayo.edu

Gastrointest Endoscopy Clin N Am 27 (2017) 471–480

<http://dx.doi.org/10.1016/j.giec.2017.03.001>

1052-5157/17/© 2017 Elsevier Inc. All rights reserved.

giendo.theclinics.com

Table 1	
TNM classification for staging esophageal cancer	
Primary Tumor (T)	
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
Tis	High-grade dysplasia
T1	Tumor invades lamina propria, muscularis mucosae, or submucosa
T1a or T1m	Tumor invades lamina propria or muscularis mucosae
T1b or T1sm	Tumor invades submucosa
T2	Tumor invades muscularis propria
T3	Tumor invades adventitia
T4	Tumor invades adjacent structures
T4a	Resectable tumor invading pleura, pericardium, or diaphragm
T4b	Unresectable tumor invading other adjacent structures, such as the aorta, vertebral body, and trachea
Regional Lymph Nodes (N)	
NX	Regional lymph node(s) cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in 1–2 regional lymph nodes
N2	Metastasis in 3–6 regional lymph nodes
N3	Metastasis in 7 or more regional lymph nodes
Distant Metastasis (M)	
M0	No distant metastasis
M1	Distant metastasis

Courtesy of the American Joint Committee on Cancer (AJCC), Chicago, Illinois; with permission. The original source for this material is the AJCC Cancer Staging Manual, Seventh Edition (2010) published by Springer Science and Business Media LLC, www.springer.com.

T1sm (Fig. 1). This is followed by radiofrequency ablation (RFA) to eradicate the remaining BE segment.^{6–9} Such therapy, referred to as endoscopic eradication therapy (EET), has been shown efficacious and safe in management of those superficial cancer patients.^{10–13} EET, however, is not risk-free. There are risks to EMR and ESD, including perforation, bleeding, and stricture formation.¹⁴ Thus, among patients with advanced disease, T1sm or beyond or N1 or beyond, EMR and ESD are not indicated. Instead, these patients are normally referred to surgeons for consideration of esophagectomy with or without neoadjuvant chemoradiotherapy. Accurate staging for disease is, therefore, essential. Cross-sectional imaging with modalities, such as CT and MRI, are limited in their ability to stage EAC at local levels, especially in early stages.¹⁵ Therefore, EUS has been proposed and used as a better diagnostic test for this indication.^{6–9} This review discusses the usefulness of EUS in identifying those patients and better examining the role of EUS for this frequently encountered clinical scenario. Given the availability of several studies on the topic, best evidence-based recommendations are used to inform the discussion and conclusions.

MANAGEMENT GOALS

Defining the exact management goals for EUS in patients with BE is paramount to this discussion. In the performance of EUS for patients with BE, the authors and

Download English Version:

<https://daneshyari.com/en/article/5659953>

Download Persian Version:

<https://daneshyari.com/article/5659953>

[Daneshyari.com](https://daneshyari.com)