



## COLLECTING CANCER DATA: STOMACH AND ESOPHAGUS

2017-2018 NAACCR WEBINAR SERIES

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### Q&A

- Please submit all questions concerning webinar content through the Q&A panel.
- Reminder:
- If you have participants watching this webinar at your site, please collect their names and emails.
- We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.



## Fabulous Prizes



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## AGENDA

- Overview
- Quiz 1
- Staging
- Treatment
- Quiz 2
- Case Scenarios

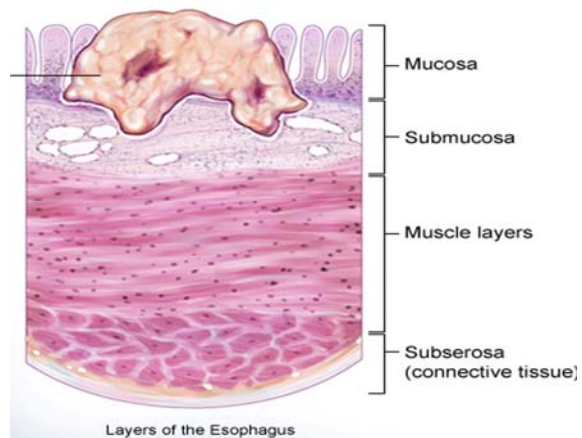
## OVERVIEW

### ESOPHAGUS AND STOMACH

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## LAYERS OF THE ESOPHAGEAL WALL

- Mucosa
  - Surface epithelium, lamina propria, and muscularis mucosa
- Submucosa
  - Connective tissue, blood vessels, and glands
- Muscularis (middle layer)
  - Striated and Smooth muscle
- Adventitia
  - Connective tissue that merges with connective tissue of surrounding structures
- *No Serosa*



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## LAYERS OF THE STOMACH WALL

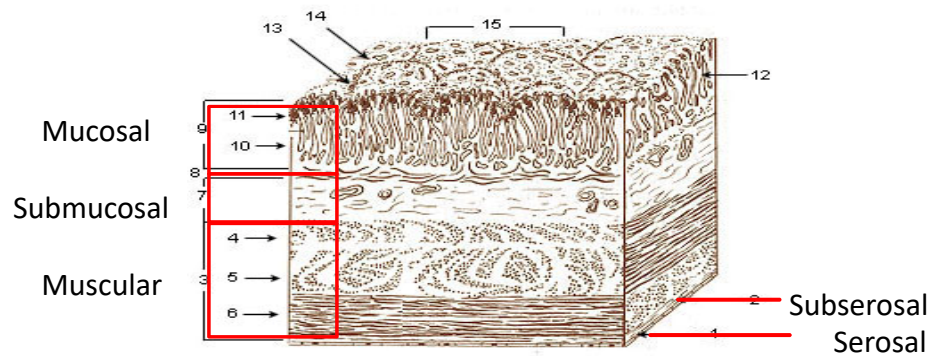
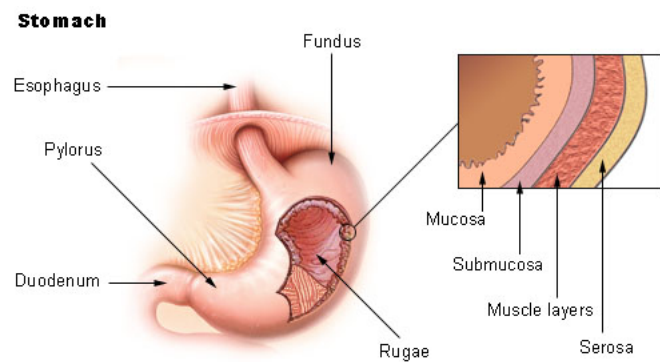


Image source: SEER Training Website

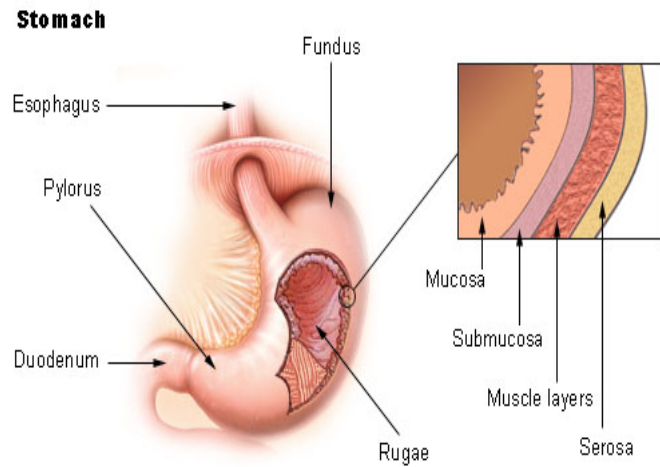
## RUGAE

- Rugae a series of ridges produced by folding of the wall of an organ.
- Allows the stomach expand when needed.



## LINITIS PLASTICA

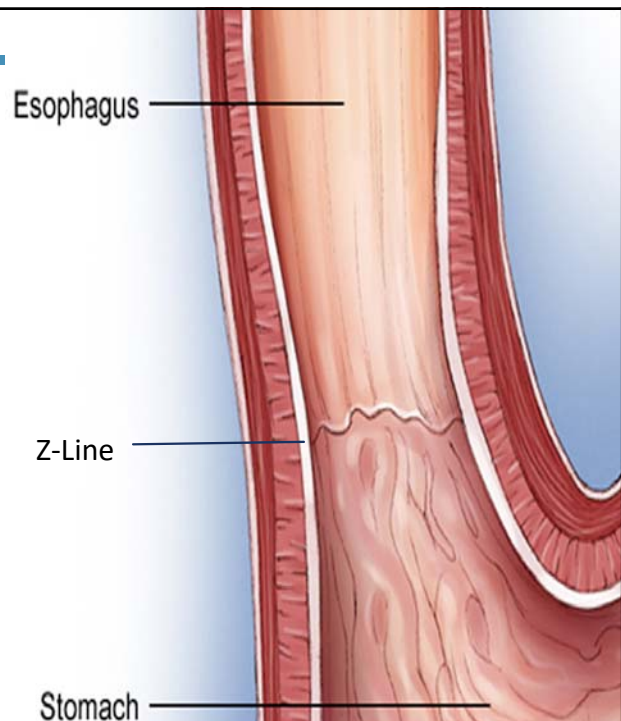
- Spreads to the muscles of the stomach wall and makes it thicker and more rigid.



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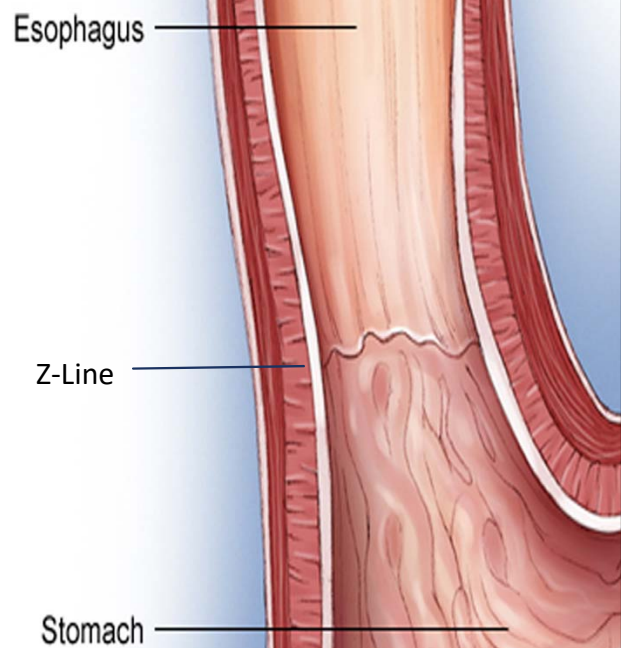
## HISTOLOGY

- Squamous Cell Carcinoma
  - Typically found in the upper two thirds of the esophagus.
- Adenocarcinoma
  - Usually forms in the lower third of the esophagus, near the stomach.



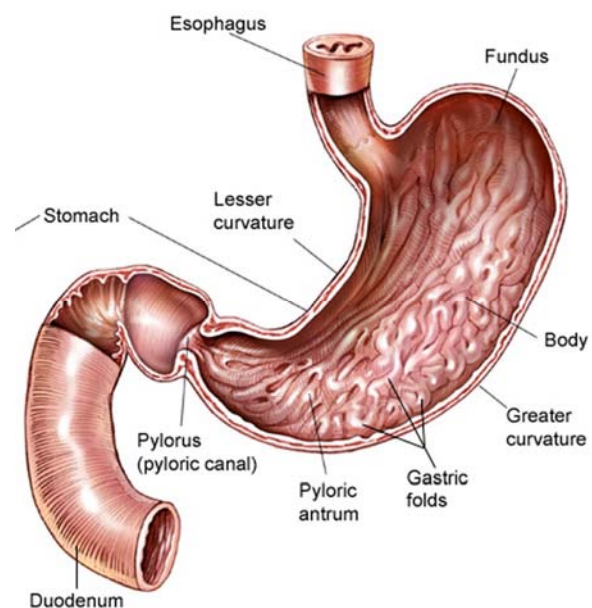
## BARRETT'S ESOPHAGUS

- Repeated exposure to acidic stomach contents washing back (refluxing) through the lower esophageal sphincter may cause squamous cells to be replaced by glandular cells resembling those cells in the stomach.



## HISTOLOGY - STOMACH

- Adenocarcinoma
  - Usually forms from the cells in the innermost lining of the stomach.
- Lymphoma
- Gastrointestinal stromal Tumor
- Carcinoid Tumor



## HIGH GRADE DYSPLASIA/CA IN SITU

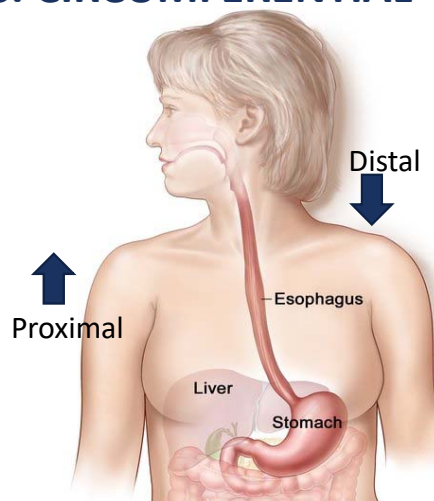
Reporting requirements have not changed for 2018. Continue reporting them as you have in the past. If you have been collecting them continue to do so. If not then don't.

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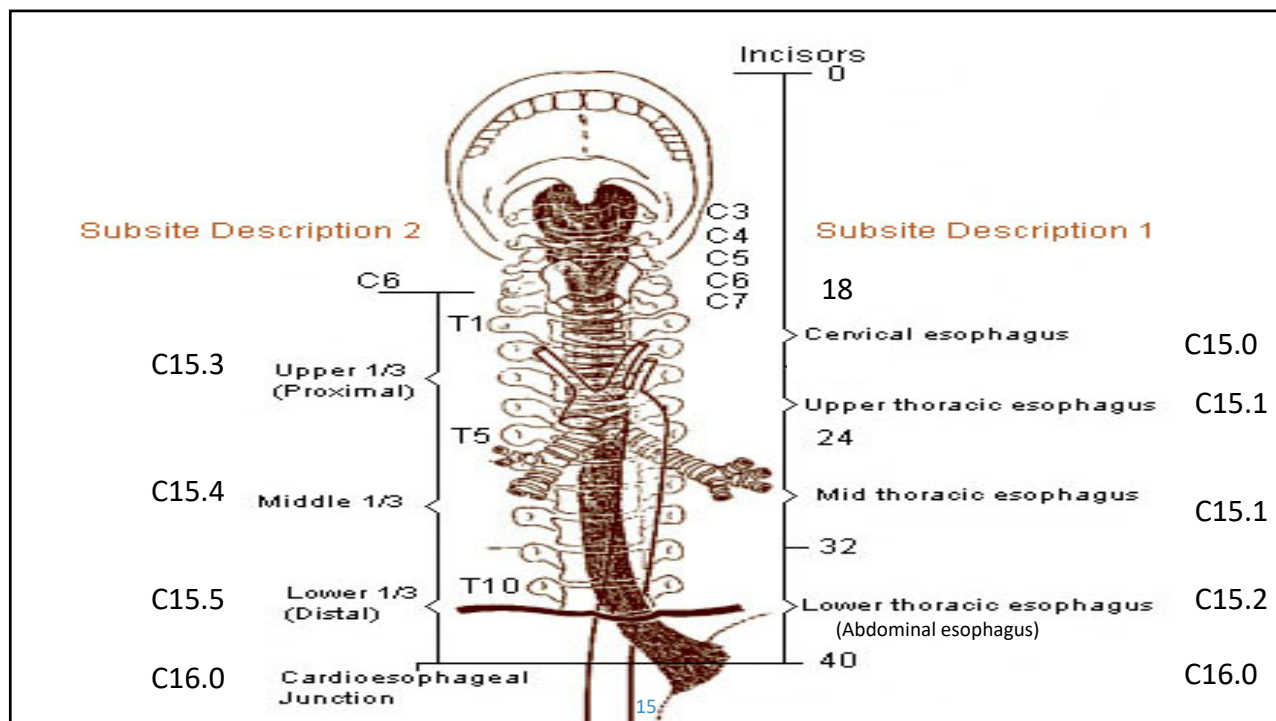
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## PROXIMAL VS. DISTAL VS. CIRCUMFERENTIAL

- Proximal- Towards the incisors
- Distal-Away from the incisors
- Circumferential- margin of healthy tissue around the esophagus
- This is the same for the entire GI tract

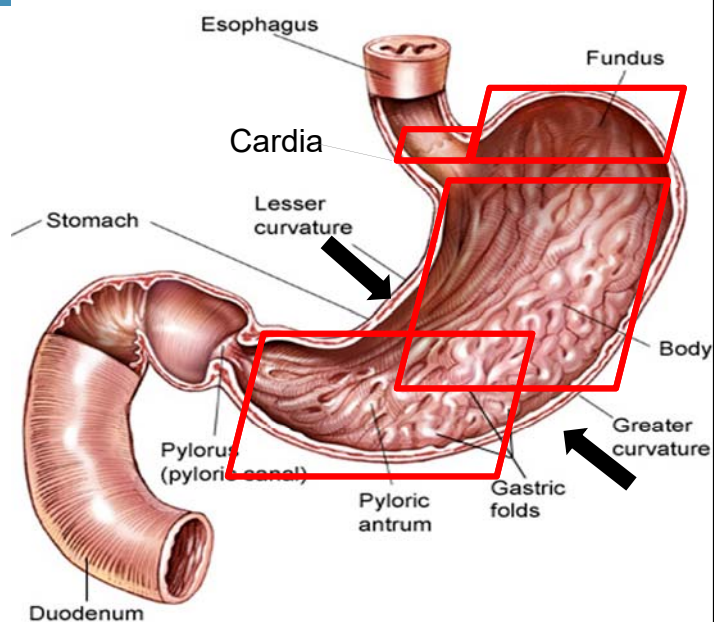


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## TOPOGRAPHY: STOMACH

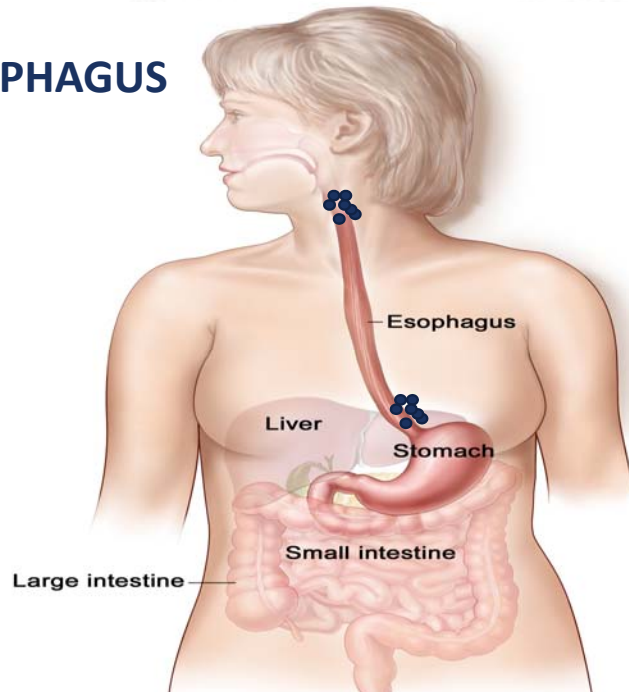
- Cardia/EGJ (C16.0)
- Fundus (C16.1)
- Body (C16.2)
- Gastric (Pyloric) Antrum (C16.3)
- Pylorus (C16.4)
- Lesser Curvature (C16.5)
  - Not classifiable to C16.0 to C16.4
- Greater Curvature (C16.6)
  - Not classifiable to C16.0 to C16.4
- Stomach NOS (C16.9)





## LYMPHATICS OF THE ESOPHAGUS

- Drainage is intramural and longitudinal
  - Concentration of lymphatic channels in the submucosa and lamina propria
  - The anatomic site of the cancer and the nodes to which the site drains may not be the same.



## LYMPHATICS OF THE STOMACH

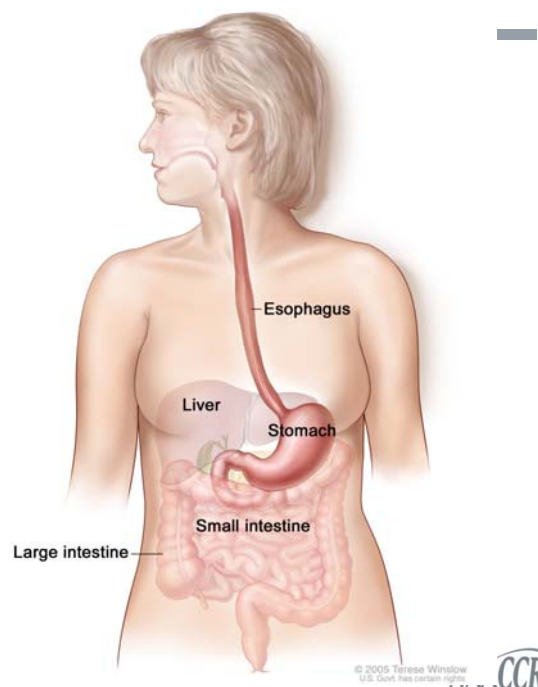
- Greater curvature
  - Greater omental
  - Pyloric
  - Pancreaticoduodenal
- Pancreatic and Splenic Area
  - Peripancreatic
  - Splenic
- Lesser curvature
  - Lesser omental
  - Left gastric
  - Celiac



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## DISTANT METASTASIS

- The most common sites for primary esophageal cancers are:
  - Liver
  - Lungs
  - Pleura
- The most common sites for primary gastric cancers are:
  - Liver
  - Peritoneal surface
  - Distant lymph nodes



## CODING THE GRADE DATA ITEMS

- Grade
  - Assigned to cases diagnosed prior to 2018
- Clinical Grade, Pathologic Grade, Post-therapy Grade
  - Assigned to cases diagnosed 2018 and forward
- Review of new grade data items (see handouts)

## POP QUIZ 1

- A patient has an EGD with a biopsy and is found to have *moderately differentiated* adenocarcinoma.
- An esophagectomy was done one week later and the patient was found to have *poorly differentiated* adenocarcinoma.

Data Item	Dx Year 2017	Dx Year 2018
Grade	3	(blank)
Clinical Grade	(blank)	2
Pathologic Grade	(blank)	3
Post-therapy Grade	(blank)	(blank)



## POP QUIZ 2

- A patient has an EGD with a biopsy and is found to have *poorly differentiated* adenocarcinoma.
- An esophagectomy was done one week later and the patient was found to have *moderately differentiated* adenocarcinoma.

Data Item	Dx Year 2017	Dx Year 2018
Grade	3	(blank)
Clinical Grade	(blank)	3
Pathologic Grade	(blank)	3
Post-therapy Grade	(blank)	(blank)

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## QUESTIONS?

QUIZ 1

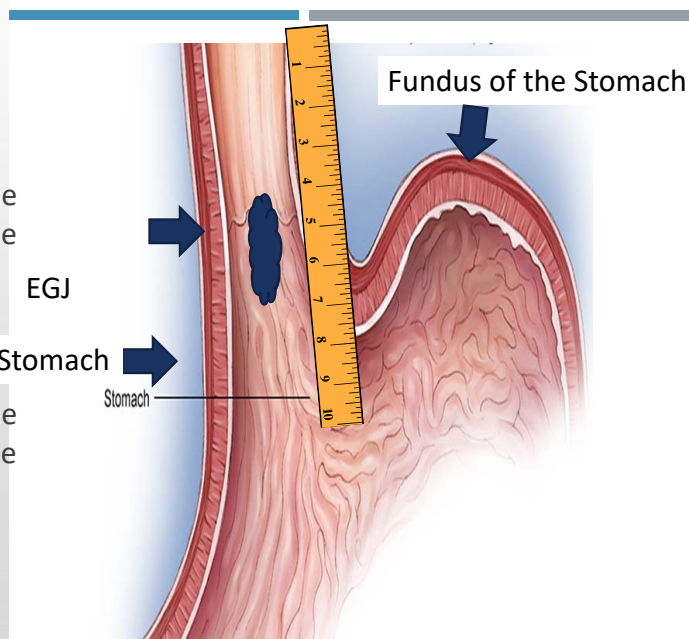
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## STAGING

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## STAGING ISSUE

- 7<sup>th</sup> edition
  - If the epicenter of tumor is in the EGJ or in the proximal **5cm** of the stomach **and** the cardia is involved stage as esophagus
- 8<sup>th</sup> edition
  - If the epicenter of tumor is in the EGJ or in the proximal **2cm** of the stomach **and** the cardia is involved stage as esophagus



## SCHEMA DISCRIMINATOR 1: ESOPHAGUSGEJUNCTION (EGJ)/STOMACH

Code	Description	AJCC Disease ID
<b>0</b>	NO involvement of esophagus or gastroesophageal junction AND epicenter at ANY DISTANCE into the proximal stomach (including distance unknown)	17: Stomach
<b>2</b>	INVOLVEMENT of esophagus or esophagogastric junction (EGJ) AND epicenter LESS THAN OR EQUAL TO 2 cm into the proximal stomach	16 Esophagus AND go to Schema Discriminator 2: Histology Discriminator for 8020/3
<b>3</b>	INVOLVEMENT of esophagus or esophagogastric junction (EGJ) AND epicenter GREATER THAN 2 cm into the proximal stomach	17: Stomach
<b>9</b>	UNKNOWN involvement of esophagus or gastroesophageal junction AND epicenter at ANY DISTANCE into the proximal stomach (including distance unknown)	17: Stomach

## POP QUIZ 3

- A patient was found to have a lesion in the proximal stomach. The epicenter of the lesion was located in the cardia 2.5cm below the gastroesophageal junction. Biopsy confirmed adenocarcinoma.
  - Primary site is C16.0
  - What is Schema Discriminator 1:EsophagusGEJunction (EGJ)/Stomach?

3: INVOLVEMENT of esophagus or esophagogastric junction (EGJ) AND epicenter GREATER THAN 2 cm into the proximal stomach. Stage based on **Stomach** chapter.

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## SCHEMA DISCRIMINATOR 2: HISTOLOGY DISCRIMINATOR FOR 8020/3

Code	Description	AJCC Disease ID
1	Undifferentiated carcinoma with squamous component	16.1: Esophagus and Esophagogastric Junction: Squamous Cell Carcinoma
2	Undifferentiated carcinoma with glandular component	16.2: Esophagus and Esophagogastric Junction: Adenocarcinoma
9	Undifferentiated carcinoma, NOS	16.1: Esophagus and Esophagogastric Junction: Squamous Cell Carcinoma

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## POP QUIZ 4

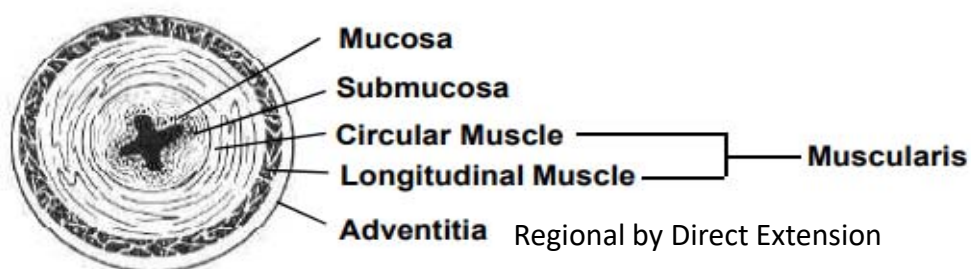
- A patient was found to have a lesion in the upper esophagus. A biopsy of the lesion confirmed undifferentiated carcinoma (8020/3).
  - What stage table would be used to assign a stage group to this case?
- ➔
- 16.1: Esophagus and Esophagogastric Junction: Squamous Cell Carcinoma
  - 16.2: Esophagus and Esophagogastric Junction: Adenocarcinoma

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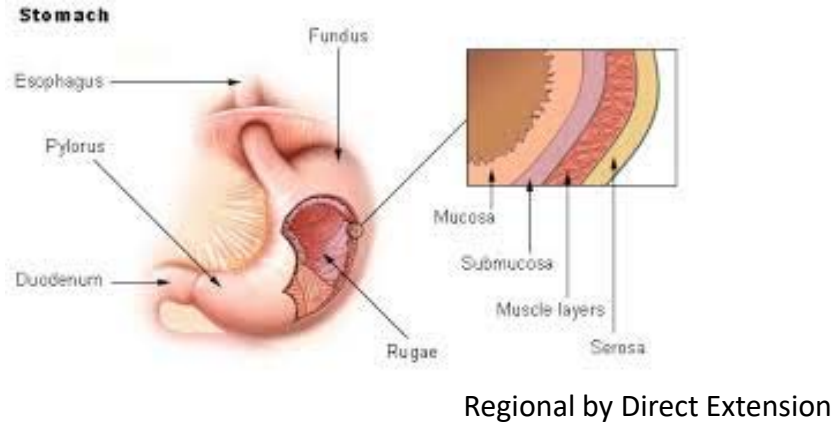
## SUMMARY STAGE-ESOPHAGUS

### ANATOMIC DRAWINGS OF THE ESOPHAGUS



CROSS SECTION OF ESOPHAGUS

## SUMMARY-STOMACH



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## SUMMARY STAGE

- Summary Stage 2000
- Summary Stage 2018
  - Schema Discriminator 1 is used to determine the Summary Stage chapter for C16.0.

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## AJCC STAGING: ESOPHAGUS

7<sup>TH</sup> AND 8<sup>TH</sup>



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## 8<sup>TH</sup> ERRATA

- Title of table 16.1 changed (see page 188)
- AJCC ID
  - 16.1 Squamous cell carcinoma
  - 16.2 Adenocarcinoma
  - 16.3 Other histologies

## AJCC 7<sup>TH</sup> AND 8<sup>TH</sup> EDITION

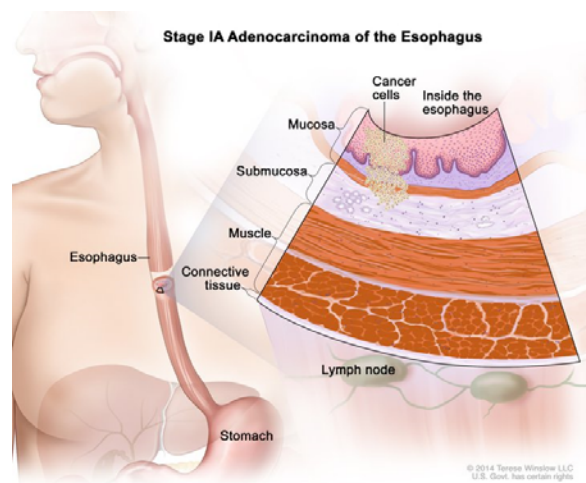
- Rules for classification
  - Clinical-standard rules
    - Physical exam, endoscopy, imaging, etc
  - Pathologic-standard rules
    - Excision of the primary tumor
    - Lymph nodes status pathologically confirmed

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## 7<sup>TH</sup> AND 8<sup>TH</sup> EDITION T VALUES

- Based on depth of invasion
  - Epithelium
  - Lamina propria
  - Muscularis mucosae
  - Submucosa
  - Muscularis propria
  - Adventicia
  - Adjacent structures

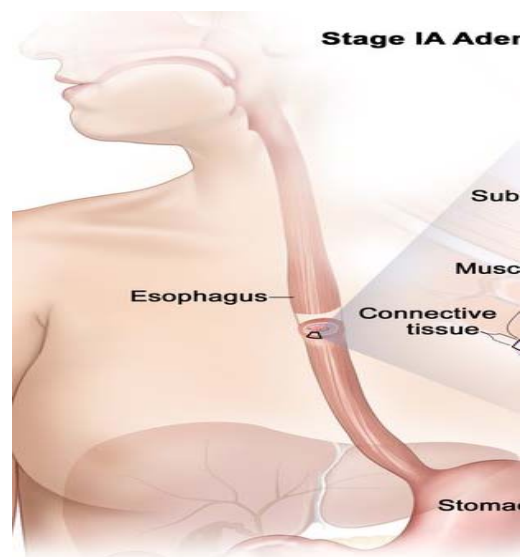


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## 7<sup>TH</sup> AND 8<sup>TH</sup> N VALUES

- How many regional lymph nodes involved?
- The number of nodes impacts stage group.
  - 1-2
  - 3-6
  - More than 6

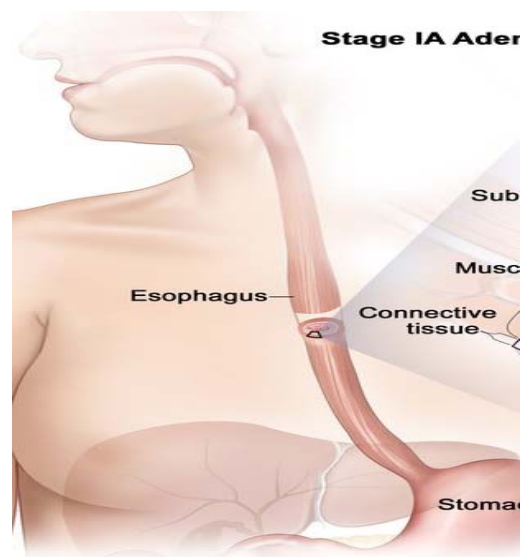


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## 7<sup>TH</sup> AND 8<sup>TH</sup> M VALUES

- How many regional lymph nodes involved?
- The number of nodes impacts stage group.
  - 1-2
  - 3-6
  - More than 6



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## STAGE GROUP 7<sup>TH</sup> AND 8<sup>TH</sup> EDITION

- Different stage table based on histology
- Grade plays a big role in stage calculation
- Location (upper, middle, lower) also plays a role.

Pg 109

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## STAGE GROUP 8<sup>TH</sup> EDITION

- AJCC ID 16.1 Squamous
  - Stage table for Clinical, Pathological, and Postneoadjuvant stage
  - Pathological stage includes tumor location in stage calculation
- AJCC ID 16.2 Adenocarcinoma
  - Stage table for Clinical, Pathological, and Postneoadjuvant stage
- AJCC ID 16.3 Other Histologies
  - No stage table
  - Assign T, N, M, but no stage
  - *Computer will take you to the appropriate stage table*

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## TUMOR LOCATION

- Upper
- Middle
- Lower

See Table 16.1 page 187

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## SSDI: ESOPHAGUS AND EGJ TUMOR EPICENTER

**Note 1:** This data item is used for pathological staging for squamous cell carcinoma of the esophagus and esophagogastric junction. If information is available for clinical staging, record it.

**Note 2:** Location is defined by the position of the **epicenter** of the tumor in the esophagus.

Information is most likely to be obtained from pathological exam, scopes, operative notes or CT scans. The epicenter of the lesion is used to describe location.

*Example:* If the lesion was from 15-21 cm, this is a 6-cm lesion with **epicenter at 18 cm**. It is the midpoint.

**Note 3:** Clinician or pathologist statement of epicenter being the upper, middle, or lower takes priority over any individual results or measurements. If no statement of epicenter being the upper, middle, or lower is provided, the following measurements may be used.

- 15-24 cm from incisors = upper
- 25-29 cm from incisors = middle
- 30-40/45 cm from incisors = lower

**Note 4:** Additional information about the epicenter may be found in Chapter 16, *Esophagus and Esophagogastric Junction*, Table 16.1 and Figure 16.1.

**Note 5:** The ascertainment of the epicenter of the tumor is for staging purposes and is separate from the assignment of the ICD-O-3 topography code. If you have an overlapping tumor (C158), do not recode the topography based on the epicenter.

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## SSDI: ESOPHAGUS AND EGJ TUMOR EPICENTER

Code	Description
0	U: Upper (Cervical/Proximal esophagus to lower border of azygos vein)
1	M: Middle (Lower border of azygos vein to lower border of inferior pulmonary vein)
2	L: Lower (Lower border of inferior pulmonary vein to stomach, including gastroesophageal junction)
9	X: Esophagus, NOS Specific location of epicenter not documented in medical record Specific location of epicenter not assessed or unknown if assessed

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## USING GRADE TO ASSIGN STAGE GROUP

- Clinical Grade
  - Prior to any treatment
- Pathological Grade
  - From resected specimen prior to systemic or radiation therapy
- Post-Therapy Grade
  - From resected specimen post systemic or radiation therapy

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## POP QUIZ 5

- A patient had an EGD with EUS and was found to have tumor in the upper esophagus with invasion into, but not through the muscularis.
- Biopsy confirmed poorly differentiated squamous cell carcinoma.
- An MRI showed did not show any enlarged lymph nodes or metastasis.

Data Item	7 <sup>th</sup> ed	8 <sup>th</sup> ed
Clinical T	cT2	cT2
Clinical N	cN0	cN0
Clinical M	cM0	cM0
Clinical Grade	3	3
Stage	2B	2
Path T		
Path N		
Path M		
Path Grade		
Stage		

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## POP QUIZ 5

- Pathology from esophagectomy
  - Histologic Type: Squamous cell carcinoma
  - Histologic Grade: Moderately differentiated
  - Tumor Extension: Tumor invades through the muscularis propria into the periesophageal soft tissue (adventitia)
  - Regional Lymph Nodes: No regional lymph node metastasis
    - Number of regional lymph nodes examined: 12
    - Number of regional lymph nodes involved: 0

Data Item	7 <sup>th</sup> ed	8 <sup>th</sup> ed
Clinical T	cT2	cT2
Clinical N	cN0	cN0
Clinical M	cM0	cM0
Clinical Grade	3	3
Stage	2B	2
Path T	pT3	pT3
Path N	pN0	pN0
Path M	cM0	cM0
Path Grade	3	3
Stage	2B	2B

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## POP QUIZ 6

- A patient had an EGD with EUS and was found to have tumor in the distal esophagus at the EGJ. The tumor was confined to the muscularis propria. Three enlarged lymph nodes were identified proximal to the mass consistent with malignancy.
  - Biopsy of mass: poorly differentiated adenocarcinoma.
  - Biopsy of lymph node: metastatic adenocarcinoma.
- An MRI did not show any additional enlarged lymph nodes or metastasis.

Data Item	7 <sup>th</sup> ed	8 <sup>th</sup> ed
Clinical T	<b>cT2</b>	<b>cT2</b>
Clinical N	<b>cN2</b>	<b>cN2</b>
Clinical M	<b>cM0</b>	<b>cM0</b>
Clinical Grade	<b>3</b>	<b>3</b>
Stage	<b>3A</b>	<b>4A</b>
Path T		
Path N		
Path M		
Path Grade		
Stage		

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## POP QUIZ 6

- The patient went on to have neoadjuvant chemotherapy followed by an esophagectomy. Pathology from the esophagectomy is below.
  - Histologic Type: Adenocarcinoma
  - Histologic Grade: well differentiated
  - Tumor Extension: No residual tumor
  - Regional Lymph Nodes: No regional lymph node metastasis
    - Number of regional lymph nodes examined: 12
    - Number of regional lymph nodes involved: 0

Data Item	7 <sup>th</sup> ed	8 <sup>th</sup> ed
Clinical T	<b>cT3</b>	<b>cT3</b>
Clinical N	<b>cN2</b>	<b>cN2</b>
Clinical M	<b>cM0</b>	<b>cM0</b>
Clinical Grade	<b>3</b>	<b>3</b>
Stage	<b>3B</b>	<b>4A</b>
Path T	<b>ypT0</b>	
Path N	<b>ypN0</b>	
Path M	<b>cM0</b>	
Path Grade	<b>1</b>	<b>9</b>
Stage	<b>99</b>	<b>99</b>

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## POP QUIZ 6

- The patient went on to have neoadjuvant chemotherapy followed by an esophagectomy. Pathology from the esophagectomy is below.
  - Histologic Type: Adenocarcinoma
  - Histologic Grade: well differentiated
  - Tumor Extension: No residual tumor
  - Regional Lymph Nodes: No regional lymph node metastasis
    - Number of regional lymph nodes examined: 12
    - Number of regional lymph nodes involved: 0

Data Item	7 <sup>th</sup> ed	8 <sup>th</sup> ed
Clinical T	<b>cT3</b>	<b>cT3</b>
Clinical N	<b>cN2</b>	<b>cN2</b>
Clinical M	<b>cM0</b>	<b>cM0</b>
Clinical Grade	<b>3</b>	<b>3</b>
Stage	<b>3B</b>	<b>4A</b>
Post-therapy T		<b>ypT0</b>
Post-therapy N		<b>ypN0</b>
Post-therapy M		<b>cM0</b>
Post-therapy Grade		<b>1</b>
Post-therapy Stage		<b>1</b>

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## REQUIRED SSF'S

- CS Site-Specific Factor 1
  - Clinical Assessment of Regional Lymph Nodes
- CS Site-Specific Factor 25
  - Schema Discriminator: EsophagusGEJunction (EGJ)/Stomach

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## SSDI'S

- Esophagus and EGJ Tumor Epicenter
- Schema Discriminator 1 (EsophagusGEJunction (EGJ)/Stomach)
  - Only completed if primary site is C16.0
- Schema Discriminator 2 (Histology Discriminator for 8020/3)
  - Only completed if histology is carcinoma undifferentiated, NOS (8020/3)

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## QUESTIONS?

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## AJCC STAGING: STOMACH

7<sup>TH</sup> AND 8<sup>TH</sup>



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## 8<sup>TH</sup> ERRATA

- No Errata
- AJCC ID 17

## AJCC 7<sup>TH</sup> AND 8<sup>TH</sup> EDITION

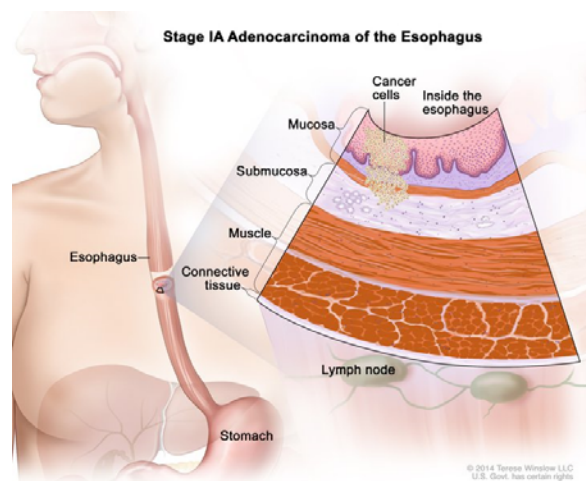
- Rules for classification
  - Clinical-standard rules
    - Physical exam, endoscopy, imaging, etc
  - Pathologic-standard rules
    - Excision of the primary tumor
    - Lymph nodes status pathologically confirmed

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## 7<sup>TH</sup> AND 8<sup>TH</sup> EDITION T VALUES

- Based on depth of invasion
  - Epithelium
  - Lamina propria
  - Muscularis mucosae
  - Submucosa
  - Muscularis propria
  - Adventicia
  - Adjacent structures
  - Serosa

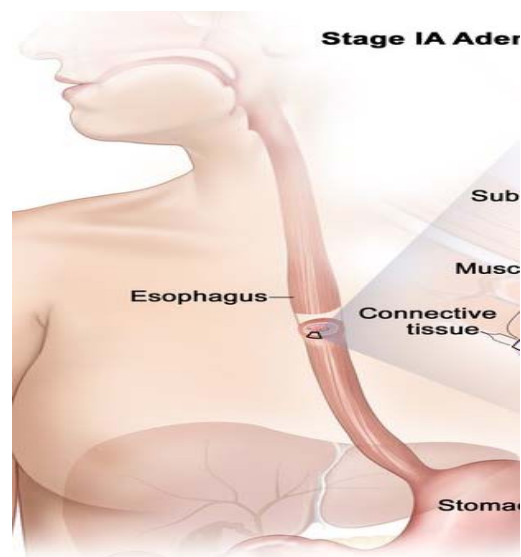


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## 7<sup>TH</sup> AND 8<sup>TH</sup> N VALUES

- How many regional lymph nodes involved?
- The number of nodes impacts stage group.
  - 1-2
  - 3-6
  - 7-15
  - 16+

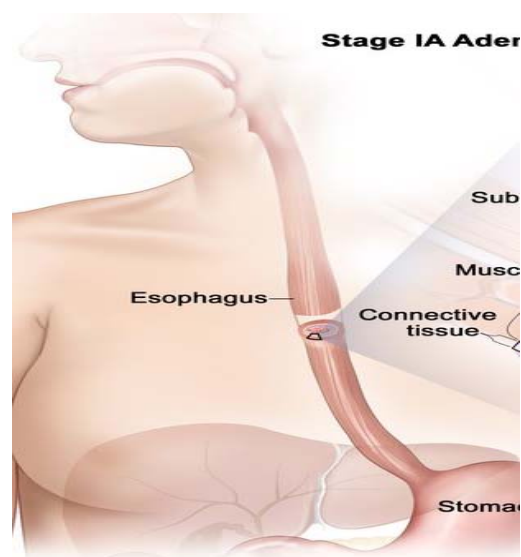


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## 7<sup>TH</sup> AND 8<sup>TH</sup> M VALUES

- How many regional lymph nodes involved?
- The number of nodes impacts stage group.
  - 1-2
  - 3-6
  - More than 6



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## STAGE GROUP 7<sup>TH</sup> AND 8<sup>TH</sup> EDITION

- 7<sup>th</sup> edition has as single table to be used for clinical and pathological stage
- 8<sup>th</sup> edition has a different table for clinical, pathological, and postneoadjuvant stage.

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## POP QUIZ 7

- A patient had an EGD and was found to have tumor in antrum of the stomach.
- Biopsy confirmed adenocarcinoma.
- A CT showed a 3cm mass in antrum of the stomach. No extension of the primary tumor into surrounding tissues or adjacent structures was seen. No enlarged lymph nodes or metastasis were identified.

Data Item	7 <sup>th</sup> ed	8 <sup>th</sup> ed
Clinical T	cTX	cTX
Clinical N	cN0	cN0
Clinical M	cM0	cM0
Stage	99	99
Path T		
Path N		
Path M		
Stage		

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## POP QUIZ 7

- Pathology from a distal gastrectomy
  - Histologic Type: adenocarcinoma
  - Tumor Extension: Tumor perforates the serosa, but does not invade into adjacent tissue or structures.
  - Regional Lymph Nodes: No regional lymph node metastasis
    - Number of regional lymph nodes examined: 15
    - Number of regional lymph nodes involved: 1

Data Item	7 <sup>th</sup> ed	8 <sup>th</sup> ed
Clinical T	cTX	cTX
Clinical N	cN0	cN0
Clinical M	cM0	cM0
Stage	99	99
Path T	pT4a	pT4a
Path N	pN1	pN1
Path M	cM0	cM0
Stage	3A	3A

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## REQUIRED SSF'S

- CS Site-Specific Factor 1
  - Clinical Assessment of Regional Lymph Nodes
- CS Site-Specific Factor 25
  - Schema Discriminator: EsophagusGEJunction (EGJ)/Stomach

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## SSDI'S

- Schema Discriminator 1
  - Only completed if primary site is C16.0

Code	Description	AJCC Disease ID
0	NO involvement of esophagus or gastroesophageal junction AND epicenter at ANY DISTANCE into the proximal stomach (including distance unknown)	17: Stomach
2	INVOLVEMENT of esophagus or esophagogastric junction (EGJ) AND epicenter LESS THAN OR EQUAL TO 2 cm into the proximal stomach	16 Esophagus AND go to Schema Discriminator 2: Histology Discriminator for 8020/3
3	INVOLVEMENT of esophagus or esophagogastric junction (EGJ) AND epicenter GREATER THAN 2 cm into the proximal stomach	17: Stomach
9	UNKNOWN involvement of esophagus or gastroesophageal junction AND epicenter at ANY DISTANCE into the proximal stomach (including distance unknown)	17: Stomach

## TREATMENT



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## SURGERY

- Endoscopic Mucosal Resection
  - A small cap is fitted on the end of the endoscope that has a small wire loop.
  - Fluid is injected under the nodule creating a blister.
  - The nodule is suctioned into the cap and the wire loop is closed while cautery is applied.
  - Code as 27
- This may be followed by photodynamic therapy.
  - Code 21

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## SURGERY

- Esophagectomy
  - Removal of a section of the esophagus.
  - Esophagus is reconstructed using another organ such as the stomach or large intestine.
  - Code 30
- Esophagogastrectomy
  - Removal of a section of the esophagus and the fundus of the stomach.
  - Stomach is surgically attached to the remaining esophagus.
  - Code 53
- En bloc lymph node dissection

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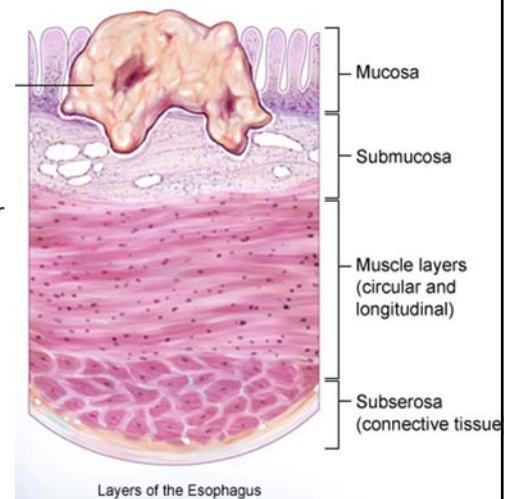
## TREATMENT BY STAGE-ESOPHAGUS

- pTis-EMR or Ablation
- pT1a
  - EMR or Ablation
  - Esophagectomy
- pT1b N0-Esophagectomy

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## TREATMENT BY STAGE-ESOPHAGUS

- cT1b -T4a any N
  - Preoperative chemoradiation
  - Definitive chemoradiation
    - Preferred for cervical esophagus
  - Preoperative chemotherapy
    - Only for adenocarcinoma of distal esophagus or EGJ
  - Esophagectomy
    - Low risk lesions less than 2cm and well differentiated
- cT4b-Definitive chemoradiation



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## GASTRIC CANCER SURGERY

- Resectable tumors
  - Endoscopic mucosal resection
  - Gastrectomy (distal, subtotal, or total) with regional lymph node dissection (15 or more nodes)
- Unresectable tumors
  - Gastric bypass with gastrojejunostomy to proximal stomach

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## GASTRIC CANCER SURGERY

- Code 30 includes:
  - Partial gastrectomy, including a sleeve resection of the stomach
  - Billroth I: anastomosis to duodenum (duodenostomy)
  - Billroth II: anastomosis to jejunum (jejunostomy)

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## TREATMENT BY STAGE-STOMACH

- Tis or T1a-EMR or Surgery
- T1b N0-Surgery
- T2 or higher and any N
  - Surgery or
  - Preoperative chemotherapy
  - Preoperative chemoradiation
- M1-Palliative therapy

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## QUESTIONS?

QUIZ 2, CASE SCENARIOS

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## COMING UP....

- Abstracting and Coding Boot Camp: Cancer Case Scenarios
  - 03/11/2018
- Collecting Cancer Data: Pancreas
  - 04/05/2018

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## Fabulous Prizes Winners



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