

Gastroesophageal Cancer

Esophageal Cancer



Diagnosis

- **Endoscopy with biopsy**
- **Bronchoscopy if above carina** (to exclude fistula)
- **CT CAP or PET scan**
- No MRI brain needed for local disease

Esophageal Cancer Risk Factors

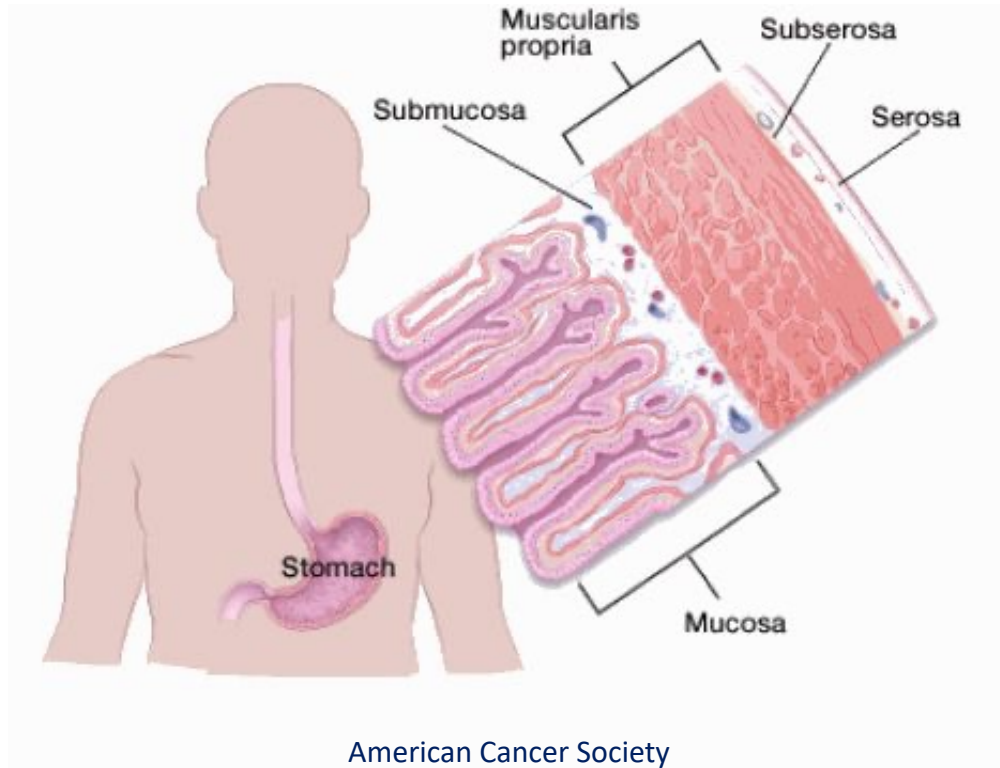
Squamous Cell Risk Factors

- African American
- Smoking
- ETOH
- Radiation Exposure
- HPV
- Anatomic (esophageal webs, Zenkers)

Adenocarcinoma Risk Factors

- White, Hispanic
- Smoking
- Obesity
- Male
- GERD
- Western Diet
- Barrett's Esophagus

Gastroesophageal Cancer



GEJ Tumors: Siewert Scale

- I = 1-5 cm above GEJ → tx as esophageal
- II = 1 cm above/2cm below GEJ → tx as esophageal
- III = 2-5 cm below GEJ → tx as gastric

Staging

T

- T1 = lamina propria, muscularis mucosa, submucosa
 - T1a = lamina propria, muscularis mucosa
 - T1b = submucosa
- T2 = muscularis propria
- T3 = subserosa
- T4 = serosa
 - T4a = pericardia, pleura
 - T4b = aorta, trachea, heart, vertebrae, other organs

N (need 15 LN for staging)

- N1 = 1-2 LN
- N2 = 3-6 LN
- N3 = 7+ LN

Esophageal Cancer: Treatment of Localized Disease

Low-Grade Dysplasia

Anti-reflux medication
Repeat EGD 6-12 months

High-Grade Dysplasia

Tis = high-grade dysplasia

Endoscopic Mucosal Resection (EMR)
Radiofrequency Ablation (RFA)

T1a can → EMR

Stage I Esophageal

T1-T2, N0 (T2N0 low risk)

Esophagectomy

T1-T2 (< 2 cm)

N0

Well-differentiated

Resection Margins:

R0 = - surgical margins

R1 = + microscopic margins

R2 = + macroscopic margins

Adjuvant Therapy Stage I

R0 = observe

R1 = surgery or chemoRT

R2 = chemoRT

Locally Advanced, Resectable

T2+ or N+ (T2N0 high risk)

1. ChemoRT + Surgery

Carboplatin/Paclitaxel Qweek

RT = 50 Gy x 5-6 weeks

Other: 5FU/cisplatin, 5FU/oxaliplatin

2. Adjuvant nivolumab

after ChemoRT + Surgery

Locally Advanced, Unresectable

T4b (≤ T4a are resectable)

Cervical esophageal

ChemoRT

* Often require PEG tube for nutritional support

Esophageal Cancer: Treatment of Metastatic Disease

Front-Line

FOLFOX = (FOL) 5FU + Leucovorin
(OX) Oxaliplatin

CAPOX = (CAP) Capecitabine
(OX) Oxaliplatin

HER2+: ADD trastuzumab

HER2-: ADD pembrolizumab or nivolumab

Second-Line/POD

Adenocarcinoma/GEJ

Ramucirumab +/- Paclitaxel

Pembrolizumab (3rd line, CPS >1%)

Trifluridine-Tipiracil/lonsurf (3rd line)

Enhertu (HER2+)

Docetaxel or Paclitaxel

Irinotecan

Squamous Cell

Pembrolizumab (CPS >10 %)

Nivolumab

Docetaxel or Paclitaxel

Irinotecan

Targeted Therapies

HER2+

Trastuzumab

Enhertu/fam-trastuzumab deruxtecan

dMMR/MSI-H or CPS/PDL1+

Pembrolizumab

Nivolumab

NTRK

Entrectinib

Larotrectinib

Palliative Therapies

Palliative RT

Esophageal Stenting

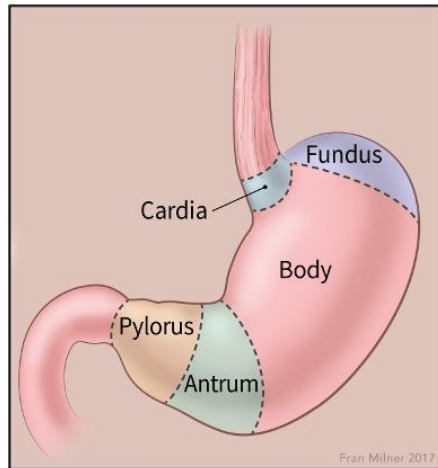
Gastric Cancer

Adenocarcinoma

Histology

- Intestinal (highest probability HER2+)
- Diffuse (Signet Ring)
- Mixed

Anatomy



American Cancer Society

Gastric Cancer Risk Factors

Clinical Risk Factors

- H. pylori
- Nitrates
- Smoking
- ETOH
- Gastritis

Genetic Risk Factors

- Lynch Syndrome (MLH1, MSH2/6, PMS2)
- Hereditary Diffuse Gastric Cancer (CDH1)
+CDH1 → prophylactic gastrectomy
- Juvenile Polyposis Syndrome (SMAD4, BMPR1A)
- Familial Adenomatous Polyposis (APC)

Gastric Cancer: Treatment of Early Disease

Stage I Gastric

T1N0 = Surgery

EMR if < 2 cm (T1a = no sub-mucosal involvement)

T1b+ → surgery (T1b = sub-mucosal involvement)

Surgery:

Cardiac: gastrectomy +/- partial esophagectomy

Non-Cardiac: sub-total or total gastrectomy

Resection Margins:

R0 = negative surgical margins

R1 = + microscopic surgical margins

R2 = + macroscopic surgical margins

Adjuvant Therapy Stage I:

R0 resection = observe

R1 resection = repeat surgery

R2 resection = chemoRT

LND:

D2 = celiac axis LND = Standard of Care

D1 = perigastric LND = NOT Standard of Care

Gastric Cancer: Treatment of Early Disease

Locally Advanced, Resectable

T2+ or N+

Surgery + Perioperative Chemo
Preferred

Perioperative Chemo Regimen:
chemo → surgery → chemo

FLOT = (F) 5FU
(L) Leucovorin
(O) Oxaliplatin
(T) Docetaxel

Other: 5FU/oxaliplatin, Capecitabine/oxaliplatin

Locally Advanced, Resectable

T2+ or N+

DID NOT Receive Perioperative Chemo

Surgery + Adjuvant Chemo
Surgery + Adjuvant ChemoRT
Acceptable

Adjuvant Chemo:
If D2 Resection

Fluoropyrimidine + Platin
CAPOX (capecitabine + oxaliplatin)
FOLFOX (5FU + oxaliplatin)

Adjuvant ChemoRT:
If D1 or R2 Resection

Fluoropyrimidine alone
5FU
Capecitabine

Gastric Cancer: Treatment of Early Disease

Locally Advanced, Unresectable

ChemoRT or Chemo

Did NOT receive surgery

ChemoRT Regimen:

CAPOX + RT

FOLFOX + RT

** Can use cisplatin in place of oxaliplatin*

Chemo Regimens:

Fluoropyrimidine + Platin based

see systemic treatments for metastatic disease

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HER2+: ADD trastuzumab +/- pembrolizumab

HER2-: ADD nivolumab (CPS >5%)

Second-Line/POD

Ramucirumab +/- Paclitaxel

Enhertu (HER2+)

Docetaxel or Paclitaxel

Irinotecan

Pembrolizumab (3rd line, CPS PDL1 >1%, MSI-H)

Trifluridine-Tipiracil/Lonsurf (3rd line)

Targeted Therapies

HER2+

Trastuzumab

Enhertu/fam-trastuzumab deruxtecan

dMMR/MSI-High or CPS/PDL1+

Pembrolizumab

Ipilimumab/Nivolumab

** consider Ipi/Nivo alone (PDL1 >5-10%)*

NTRK

Entrectinib

Larotrectinib

Gastroesophageal Cancer Reference Handout

Esophageal Cancer

Squamous Cell
Upper/Middle Esophagus

Adenocarcinoma
Lower Esophagus/GEJ

Gastroesophageal Cancer

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N0
Well-differentiated

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T4b (≤ T4a are resectable)
Cervical esophageal
ChemoRT

Gastric Cancer Tx Early Stage

Stage I Gastric

T1N0 = Surgery
EMR if < 2 cm

Surgery:
Non-Cardiac:
sub-total or total gastrectomy
Cardiac:
gastrectomy
+/- partial esophagectomy

LND:

D2 = celiac axis LND = SOC

Locally Advanced, Resectable

T2+ or N+

Surgery + Perioperative Chemo

FLOT = (F) 5FU
(L) Leucovorin
(O) Oxaliplatin
(T) Docetaxel

Locally Advanced, Resectable

T2+ or N+, NO periop chemo
D2 → chemo
D1/R2 → chemoRT

Chemo or ChemoRT

Locally Advanced, Unresectable

No Surgery

Chemo or ChemoRT

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Squamous Cell
Upper/Middle Esophagus

Adenocarcinoma
Lower Esophagus/GEJ

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Enhertu (HER2+)
Docetaxel or Paclitaxel
Irinotecan
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Trifluridine-Tipiracil/Lonsurf (3rd)

Squamous Cell
Pembrolizumab (CPS >10 %)
Nivolumab
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Targeted Therapies

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Trifluridine-Tipiracil/Lonsurf (3rd)
Pembrolizumab (3rd, CPS >1%)

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HER2+
Trastuzumab
Enhertu

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