

Minimally Invasive and Novel Therapeutics (M.I.N.T.) in Foregut Disease
September 29th -October 1st 2022

Endoscopic Submucosal Dissection (ESD)

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Endoscopic Resection

- Two predominant histologic types:
 - Esophageal adenocarcinoma (EAC)
 - Squamous cell carcinoma (SCC)

Risk of LN
metastasis
+
Curative
Resection

- **DIAGNOSTIC TOOL (STAGING)**
- **POTENTIAL CURATIVE THERAPY**

EMR vs ESD: Clinical Outcomes

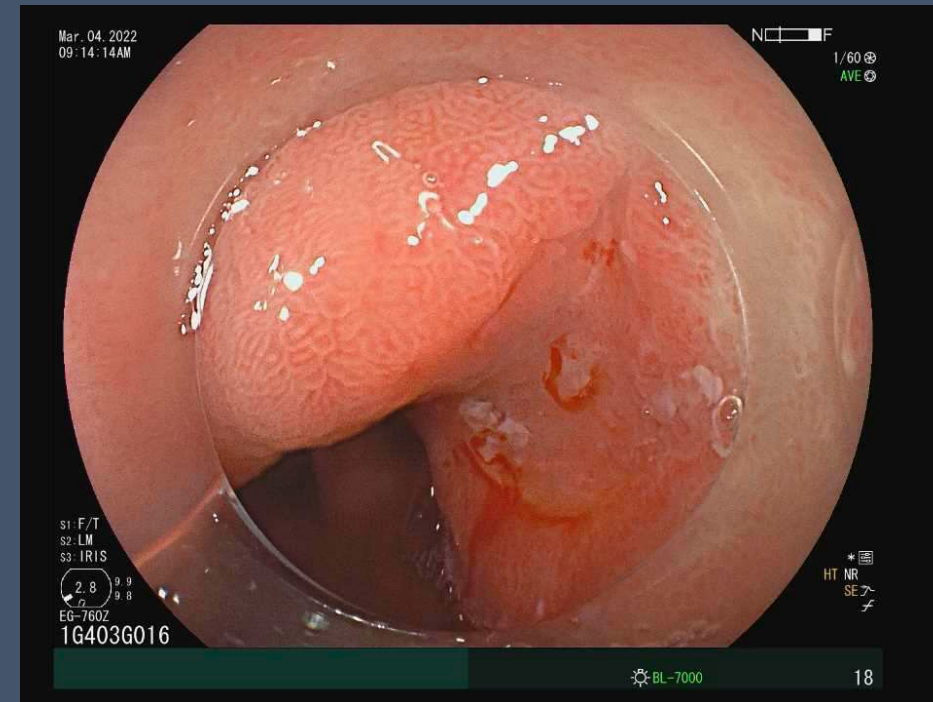
- EMR is the standard of care for BE-associated neoplasia
- Multicenter retrospective study in the US: EMR (n=140) vs ESD (n=85) for ADVANCED (median size: 39mm) BE neoplasia (HGD and cancer)

Outcomes	EMR (n=140)	ESD (n=85)	p-value
En-bloc resection	57%	98%	<0.001
R0 resection	56%	72%	<0.001
Curative resection	31%	64%	<0.001
Adverse events	14.6%	19%	1.0
Recurrence	60 (39%)	3 (5%)	< .0001



Case 1:

- A 66-year-old female with a history of Barrett's esophagus
- She was found to have a 2.5-cm umbilicated nodule at the GEJ
- Biopsy revealed adenocarcinoma
- EUS: T1a, negative for LNs



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
N  F

1/60 
AVE 

S1: F/T
S2: LM
S3: IRIS

2.8 9.9
9.8
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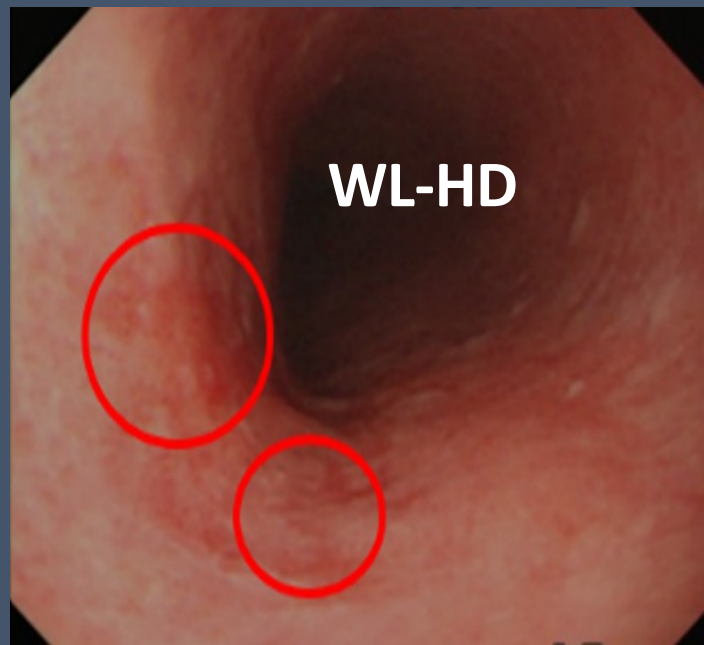
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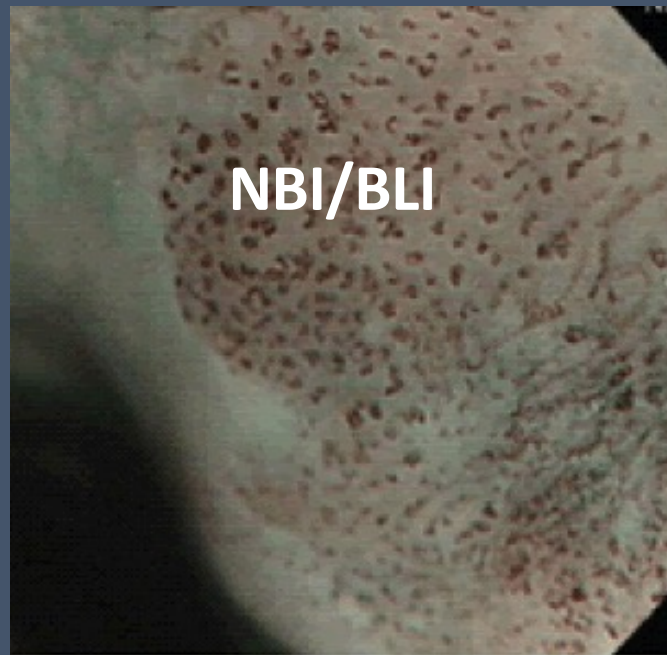
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Esophageal Squamous cell carcinoma (SCC)

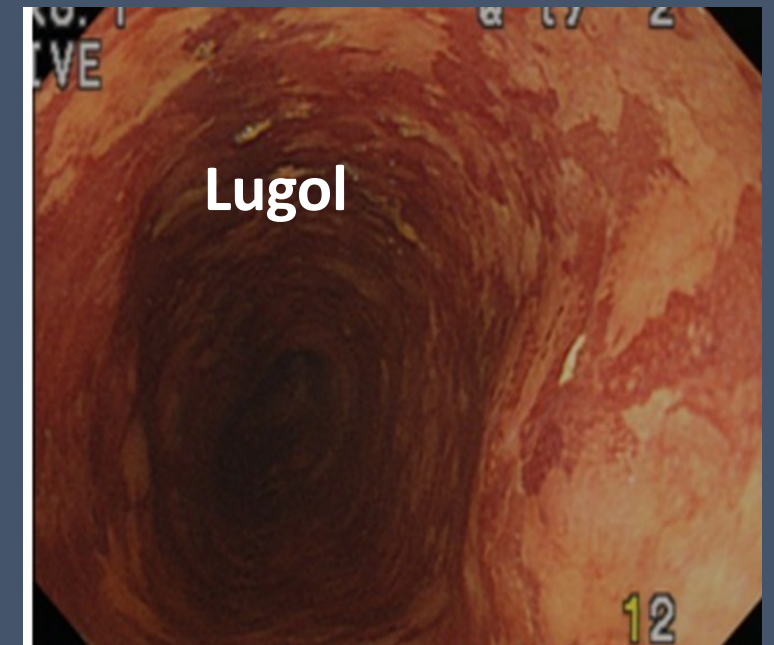
- Most common esophageal cancer worldwide but rare in the U.S.
- Early detection and diagnosis are key



Loss vascular, erythema, coarse mucosa



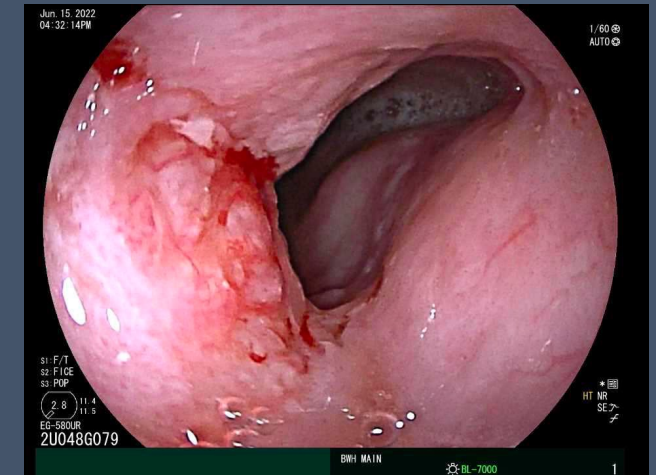
Brownish epithelium
Tortuous intraepithelial papillary capillary loops (IPCL)



Non-staining with lugol chromoendoscopy

Case 2:

- A 63-year-old female with a history of multiple thoracic tumors
- In 2009, thymic cancer: radical thymectomy and pericardial resection followed by 60 Gy of radiation
- In 2019, pleural mesothelioma: pleurectomy with heated chemotherapy
- She recently developed dysphagia, and EGD at MGH showed esophageal nodule and stenosis at 25cm from the incisors
- Biopsy from the nodule revealed SCC
- EUS: T1b, negative for LNs



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AUTO ⊗

S1: F/T
S2: LM
S3: IRIS

2.8 9.9
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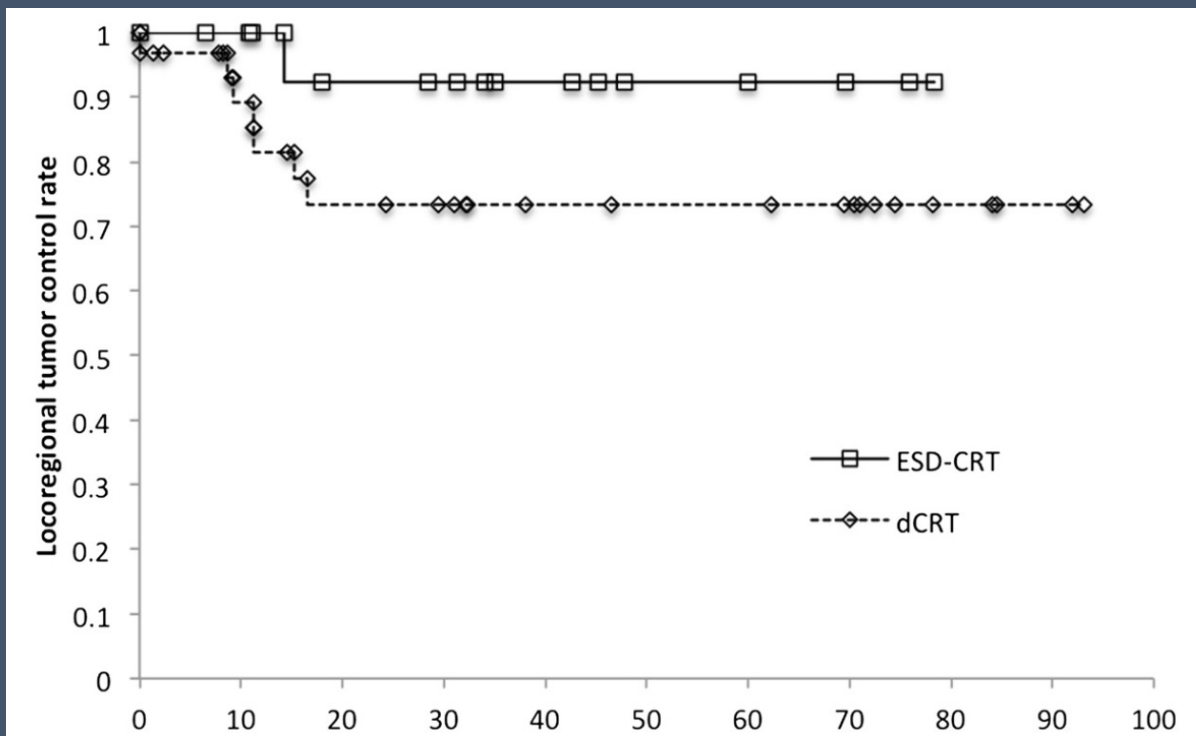
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ESD+CRT vs Definitive CRT for T1b SCC

- Retrospective study: ESD+CRT (n=16) vs definitive CRT (n=37)



3-year Cumulative Success Rates for Local Control:

92.3% ESD+CRT vs 73.3% dCRT

PRACTICE PEARLS

- ESD is a guideline-supported therapy and should be considered for:
 - Superficial esophageal SCC
- For ADVANCED lesions in BE:
 - Multifocal cancers
 - Bulky lesions ≥ 15 mm +/- fibrosis
 - Equivocal histology and/or EUS (“at least” T1a intramucosal cancer)
 - Salvage therapy after EMR and/or ablative treatment

