Dysplastic Barrett’s Esophagus: Who and How To Treat?

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High Grade Dysplasia/Early Cancer (T1a)

Low Grade Dysplasia

Non-Dysplastic Barrett’s
Eradicating Dysplastic Barrett’s

How We Do It?

What Are The Shortcomings?

What Can We Improve?
Improving Endoscopic Outcomes

Resect the Highest Grade Lesion
Improving Endoscopic Outcomes

Eradication of the Remaining BE segment after EMR
# Endo Therapy: Systematic review and meta-analysis

<table>
<thead>
<tr>
<th></th>
<th>Focal EMR + RFA</th>
<th>Complete EMR</th>
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</thead>
<tbody>
<tr>
<td>Number of patients</td>
<td>774</td>
<td>751</td>
</tr>
<tr>
<td>Median BE length</td>
<td>2 – 8 cm</td>
<td>2 – 5.5 cm</td>
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<tr>
<td>Median follow up</td>
<td>12 – 61 months</td>
<td>15 – 54.7 months</td>
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<tr>
<td>CE-N</td>
<td>93.4%</td>
<td>94.9%</td>
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<tr>
<td>Strictures</td>
<td>10.2%</td>
<td>33.5%</td>
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Desai M et al. GIE 2017
Eradicating Dysplastic Barrett’s

How We Do It?

What Are The Shortcomings?

What Can We Improve?
Complications: Systematic review and meta-analysis

- 37 studies, 9200 patients
- RFA ± EMR

Overall Rates: 8.8% (95% CI 6.5 – 11.9%)

- Pooled rates
  - Strictures: 5.6%
  - Bleeding: 1%
  - Perforation: 0.6%
Recurrences: Systematic review and meta-analysis

- 41 studies
- 4443 patients treated
- 795 cases of recurrence

Predictors of recurrence:
- Increasing age
- BE length

Recurrence rates per year:
- IM: 7%
- Dysplasia: 1.3%
- HGD/Cancer: 0.8%
In patients with BE-associated neoplasia, the goal of the endoscopic treatment should be complete eradication of the BE segment in addition to any dysplastic lesions.

Agreement: 100%
Grade of Recommendation: Strong
Quality of Evidence: Moderate
Eradicating Dysplastic Barrett’s

How We Do It?

What Are The Shortcomings?

What Can We Improve?
Low Rates of EMR Despite EMR Improving Outcomes!

- % free of dysplasia
- Months from successful eradication

- Previous EMR
- No EMR

Haidry et al. Endoscopy 2015
Focal cryoablation for BE

- 39 patients, 90% males
- Mean age: 66 yrs.
- Mean BE length: 5 cm
- Focal area treated
Making Treatment Decisions Based On Progression in BE (PIB) Score

- Multicenter outcomes project 6 centers
- 2697 patients; 6 years median follow up
- Split sample derivation model
- 70% model development; 30% validation

Risk factors
- Male gender – 9 points
- Cigarette smoking – 5 points
- BE length – 1 point/cm length
- Confirmed LGD – 11 points

- High Risk (>25 points) – Annual risk of progression 2.7%
- Intermediate Risk (17-24 points) – Annual risk of progression 1.34%
- Low Risk (0-16 points) – Annual risk of progression 0.33%

Parasa S et al. Gastroenterology 2018
Conclusions

• Neoplasia in Barrett’s may present as very subtle lesions

• Endoscopic Resection is critical

• Recurrences happen; close follow up is mandatory

• Newer devices appear promising