



Stenting for Esophageal Cancer

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NCI-IARC
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OUTLINE

- Origin stenting
- Indications for use in esophageal cancer
- Types of stents
- Stenting for esophageal cancer
 - Technique
 - Appeal of stents
 - Complications/limitations
- Conclusions
- Important questions

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STENT



Charles Stent
Dentist
1807-1885

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Indications for stenting in patients with EC

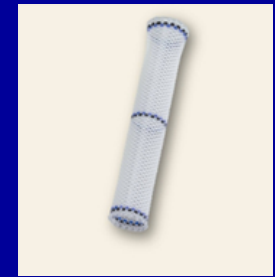
- Dysphagia
- Maintain nutritional status
- Improve quality of life
- Management of esophago-tracheal fistulae
- Allow eating while other therapies given
- Future: ? to deliver therapy

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PLASTIC STENTS



FIRST GENERATION METAL STENTS

Wallflex

Polyflex

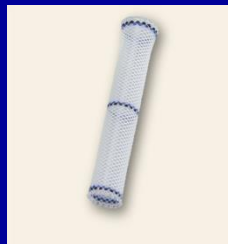
Ella

Cook

Bonastent

Taewoong

Endomaxx



CURRENT STENTS

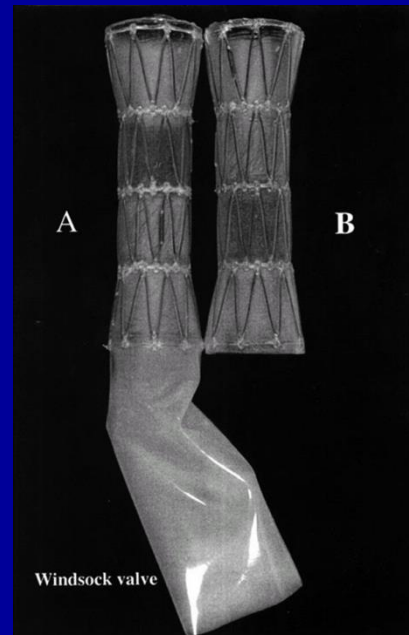


TECHNICAL MATTERS: How to choose a stent

COVERED vs
NON-COVERED

STABLE vs BIO-
ABSORBABLE

PLASTIC vs
METAL



STANDARD vs
ANTI-REFLUX

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Esophageal Stent Placement

Dr. Gregory Haber
Lenox Hill Hospital, NYC

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WHY IS STENT PREFERRED ENDOSCOPIC METHOD?

CLOSEST TO IDEAL TREATMENT

**SINGLE RX
REQUIRED**

EASIEST FOR DOC

**CAN BE USED IN
MOST PATIENTS**

**PATIENT
SATISFACTION**

STENT



Is stenting effective for palliation of malignant dysphagia?

- **Covered SEMS**

- **Technical success = 90-100%** (I)
- **Functional success = > 90%** (I)
 - ◆ Improvement in dysphagia score
 - ◆ Tolerate at least liquids
- **Esophageal fistulae = 70-100%** (II)
- **Superior to**
 - ◆ Plastic Stents (I)
 - ◆ Uncovered SEMS (I)
 - ◆ Dilation, laser, PDT (III)
 - ◆ Operative (II)
- **No direct comparisons to other therapies**
 - ◆ XRT, Chemo, combined Chemo/XRT

SAMJ 1999;89:640.

NEJM 1993;329:1302.

GIE 1996;43:478.

GIE 1998;47:113.

EJGH 1998;10:653.

BJS 2002;89:985.

AJG 2001;96:1791.

Endosc 2005;37:329.



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SEMS Complications (II-III)

Mayoral W, et al. Gastrointest Endosc 2000;51(5):556.

Raijman I, et al. Am J Gastroenterol 1997;92:2192.

- **Early: 8-16%**

Migration

Reflux

Aspiration

Perforation

Pain

- **Late: 9-18%**

- Tumor in-growth

- Tumor overgrowth

- Epithelial hyperplasia (50%)

- Structural decay

- Migration

- Food impaction



- **Increased in distal & EGJ tumors**

SITUATIONS WHEN STENT MAY NOT BE PREFERRED ENDO RX

NOT CHOOSE STENT

*HIGH CERVICAL LESION

*ASYMMETRIC

*COMPRESS TRACH

COST

\$1500-1900

STENT

IV

ENDO

DILATION, LASER, APC,
PHOTODYNAMIC THERAPY, TUMOR
PROBE, INJECTION



OLD SCHOOL

Gastroenterology

w/ David Fleischer, MD



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CONCLUSIONS

- Stents can be useful for patients with advanced esophageal cancer and dysphagia or fistula
- Main clinical limitations are migration and recurrent dysphagia
- Cost is an important limitation to use of stents in most of the world

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IMPORTANT QUESTIONS

- Could technologic improvements be made to address efficacy and safety of stents?
- Could the cost of stents be reduced?
- Could stents be used to deliver therapy as well as providing palliation?