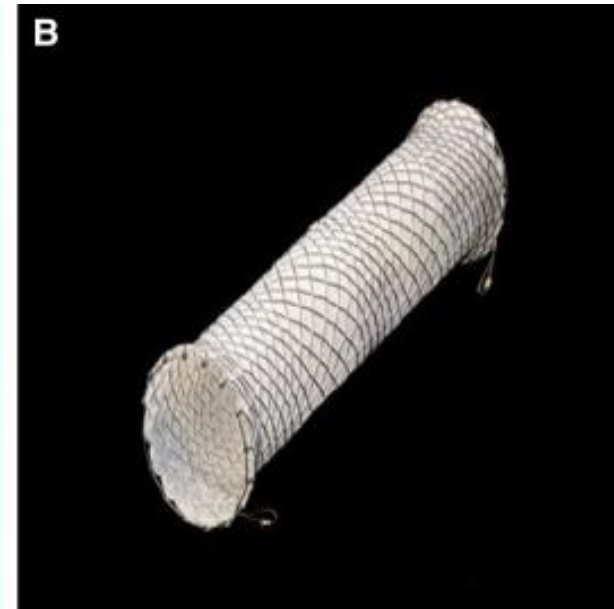
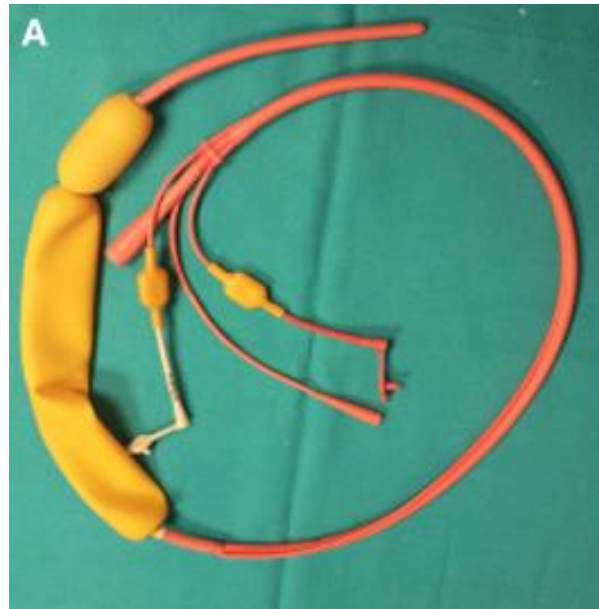


# Variceal Upper GI Bleeding: Old and New Tools

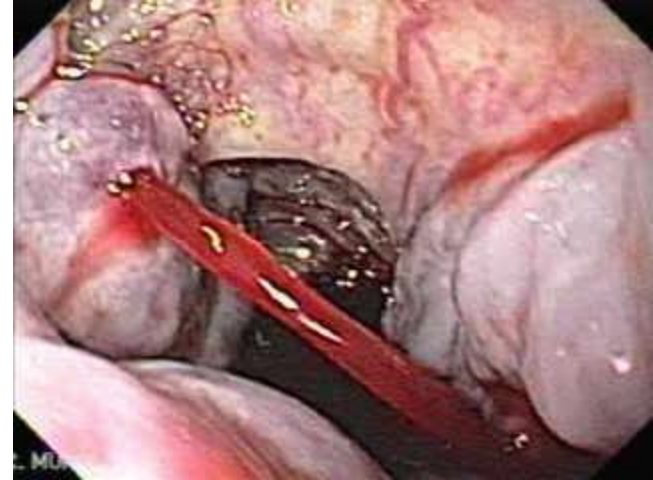
Sarmed Sami MRCP PhD  
ST7 Gastroenterology

# Outline

- Background
- Demonstration of techniques.



# Variceal Bleeding



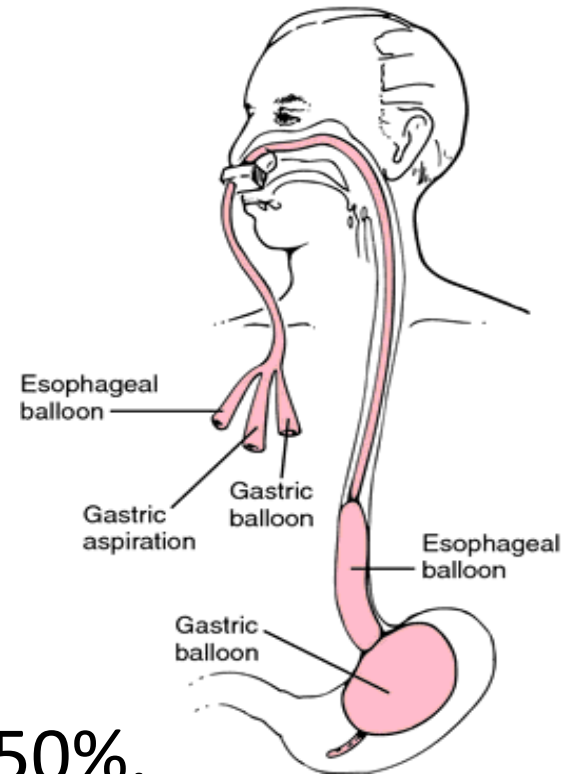
- Mortality:
  - During episode: 12-20%<sup>1</sup>.
  - Failure of Rx/re-bleed: 30-50%<sup>1</sup>.
- Treatment:
  - Resuscitation/vasoactive drugs/Abx.
  - OGD + variceal band ligation.
- Failure of Rx or early re-bleed within 5 days:
  - 2-13% ———> TIPS, frequently preceded by balloon tamponade<sup>2</sup>.

1 Banares et al, meta-analysis 8 RCTs. Hepatology 2002.

2 Abid et al, AJG 2009 & Sung et al, Lancet 1995.

# Balloon Tamponade - overall

- Immediate bleeding control up to  $\sim 90\%^*$ , but:
- Intensive care/skilled staff.
- Complications in 20-60% cases:
  - Aspiration pneumonia.
  - Oesophageal rupture.
  - Airway obstruction.
  - Oesophageal ulcers.
  - Death  $\sim 6\%$
- Temporary  $\leq 24$  hours.
- Early re-bleed after deflation: up to 50%.

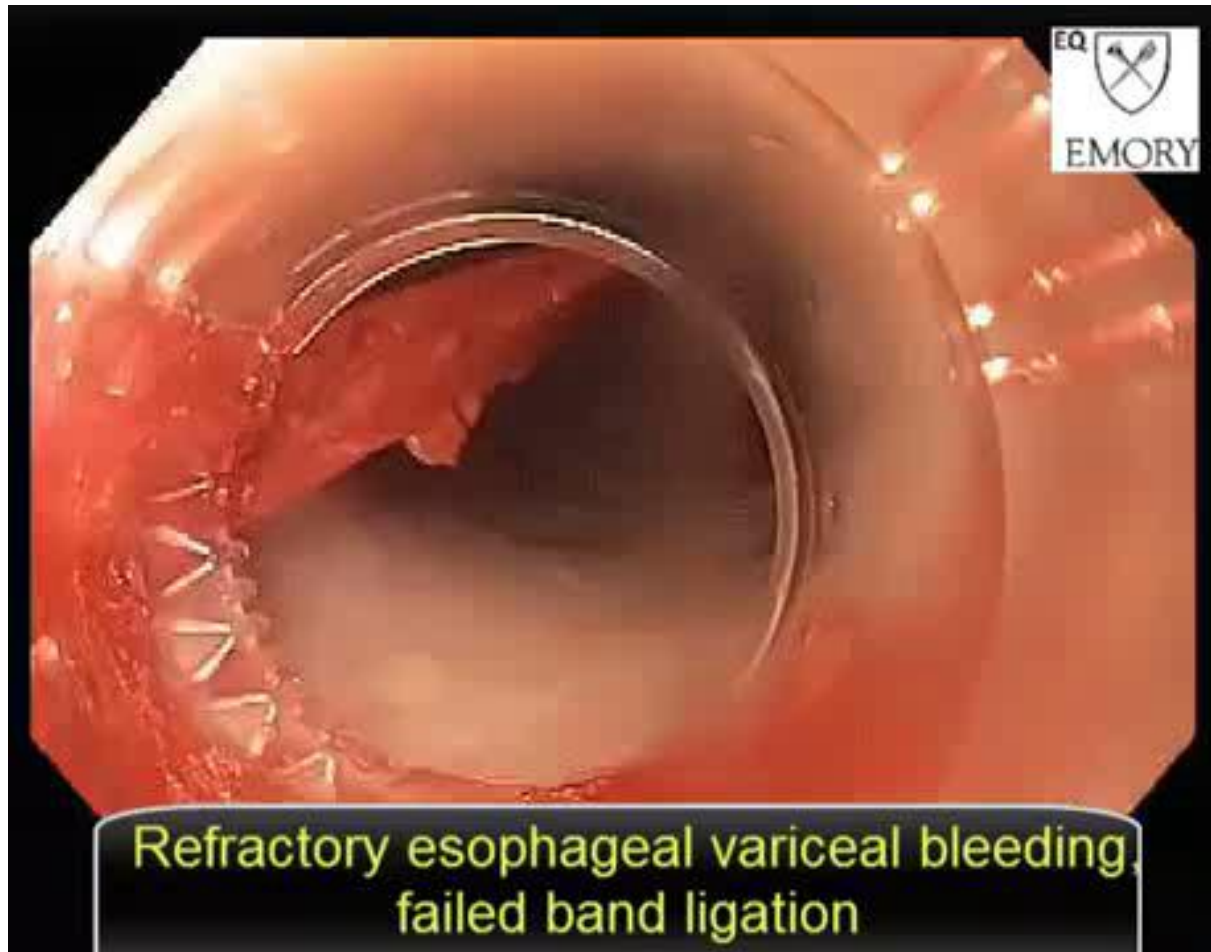


\* Review of 16 studies (1978-1997), primary variceal bleeding.

# Balloon Tamponade - placement



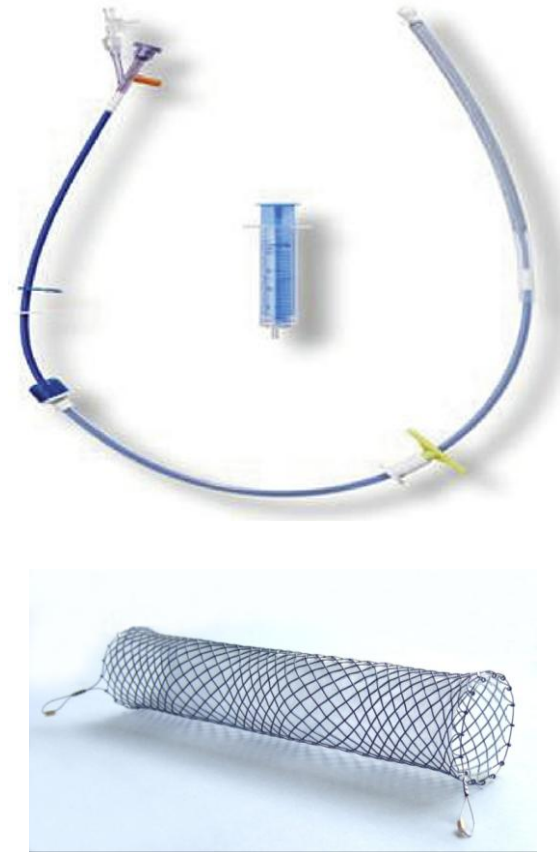
# Balloon Tamponade - confirmation



# Danis Stent

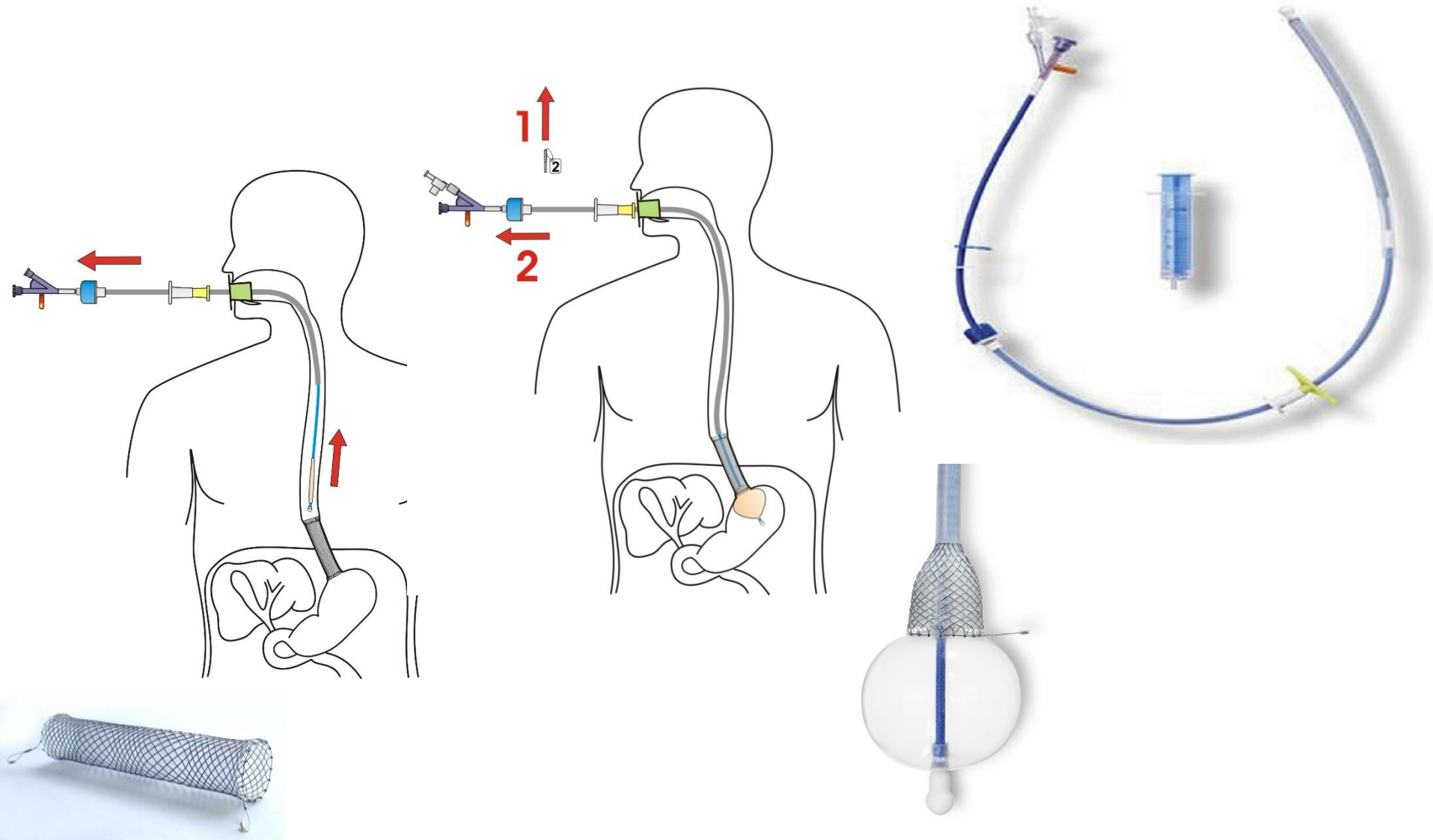
## Technical background

- Fully covered, metal.
- Self-expanding.
- Non-radiological and non-endoscopic deployment.
- CXR to assess position.
- Scheduled removal 7 days.



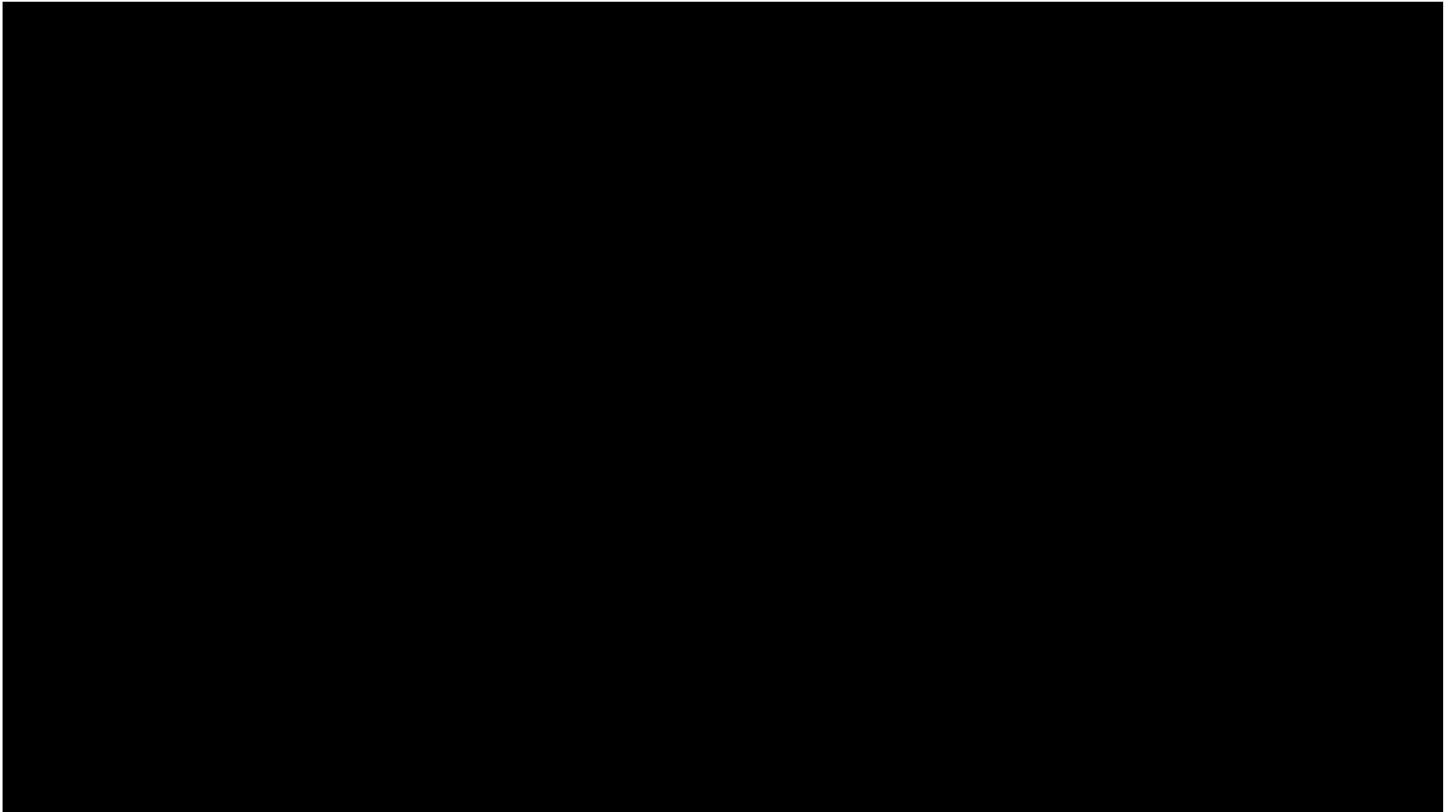
# Danis Stent

## Technical background





# Stent insertion



# Stent removal



# Balloon Tamponade or Stent?

# Esophageal Balloon Tamponade Versus Esophageal Stent in Controlling Acute Refractory Variceal Bleeding: A Multicenter Randomized, Controlled Trial

Àngels Escorsell,<sup>1,2</sup> Oana Pavel,<sup>2,3</sup> Andrés Cárdenas,<sup>2,4</sup> Rosa Morillas,<sup>2,5</sup> Elba Llop,<sup>2,6</sup> Cándid Villanueva,<sup>2,3</sup>  
Juan C. Garcia-Pagán,<sup>1,2</sup> and Jaime Bosch<sup>1,2</sup>; for the Variceal Bleeding Study Group

# Argument for/against Tamponade

- Pro's:
  - Available.
  - ?Cheaper.
  - Can be inserted under endoscopic guidance.
- Con's:
  - Higher SAEs.
  - Recurrence bleeding on deflation.
  - $\leq 24$  hours.
  - Looks cruel!



# Argument for/against Stent

- Pro's:
  - Lower SAEs/safer.
  - Better haemostatic effect.
  - Can be left up to 7 days (centres with no facilities for early TIPS).
  - Maintain nutrition, oral fluids.
- Con's:
  - Stent migration.
  - Not suitable for gastric varices.
  - Availability and cost.
  - Operator training.



# My conclusion!

- In the absence of higher quality data:  
Danis stent is “probably” more effective and  
“very likely” to be safer.

