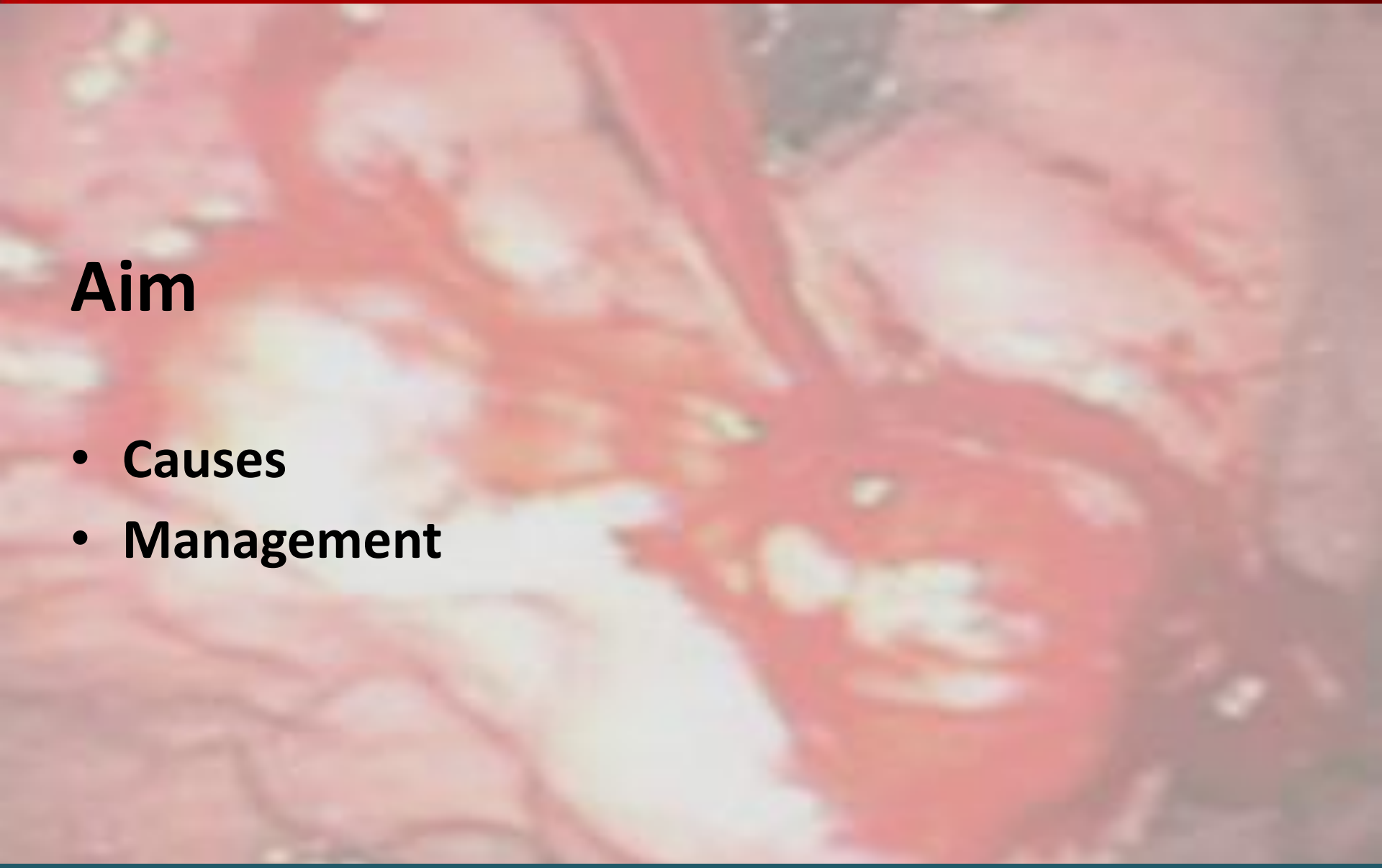
UPPER GI BLEEDING

Carlos Mesquita – Coimbra

UPPER GI BLEEDING

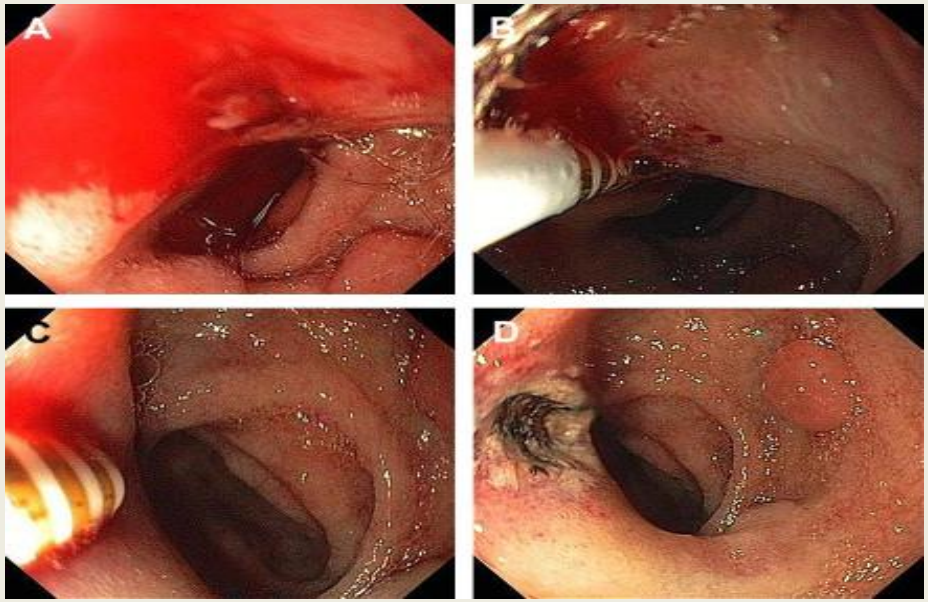


Aim

- Causes
- Management

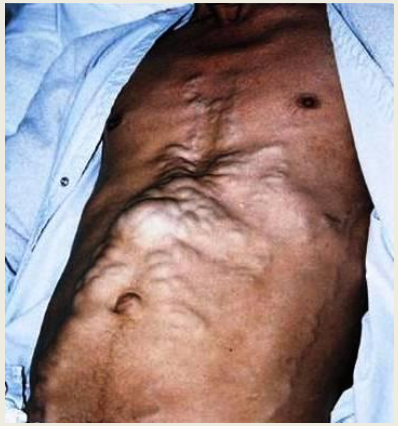
Problem

- Above angle of Treitz
- Common emergency
  - 1-2/1000 pts
  - 10% rebleeed
  - 1% angioembolization
  - <5% need surgery
- Mortality 5%
  - > 20% over 60 y
- Main cause, peptic ulcer



UPPER GI BLEEDING

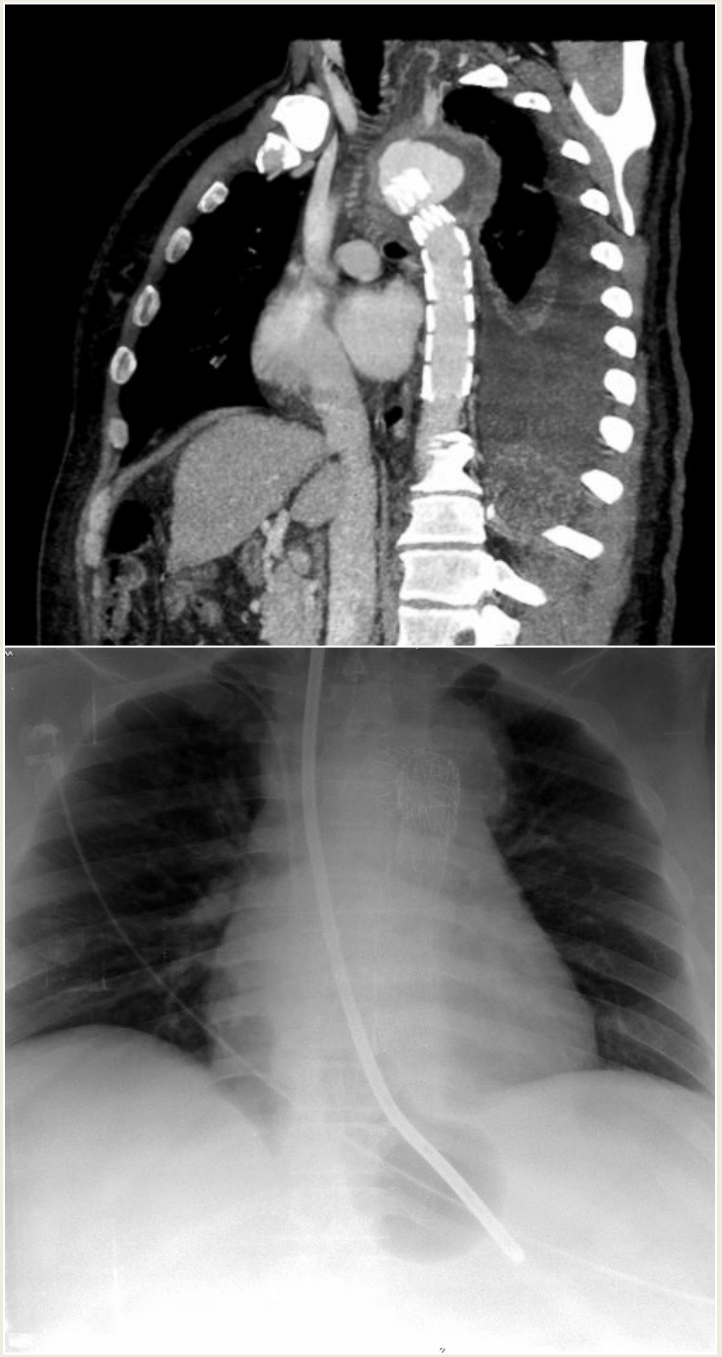
Cause	%
Peptic ulcers	55
Varices	15
Arteriovenous malformations	5
Mallory-Weiss tears	5
Tumors	5
Dieulafoy lesion	5
Other	10



15% variceal / 85% of cirrhotics bleed from

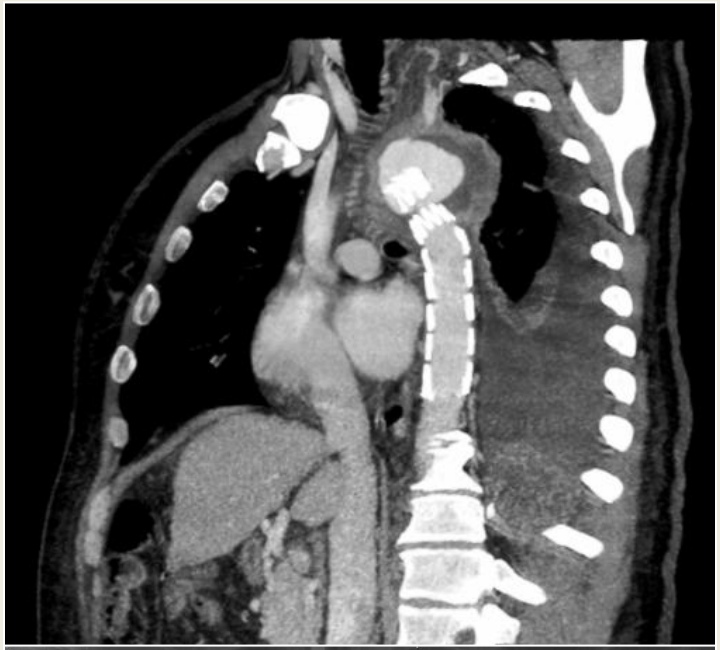
JGJ, male, 48 yo

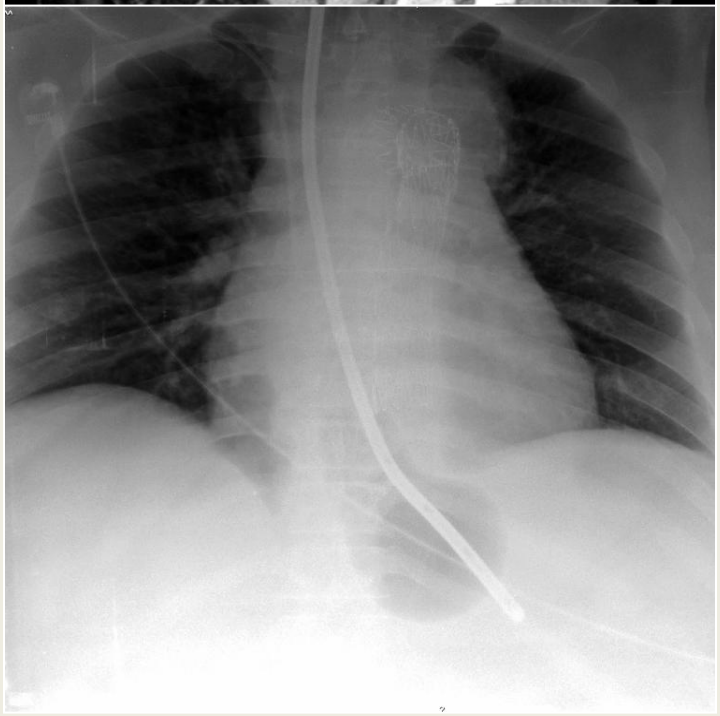
- known pré-existing chronic hepatic disease with EG varices
- ruptured proximal descending aortic aneurysm / emergency stent graft placement
- few hours later, massive bright red hematemesis



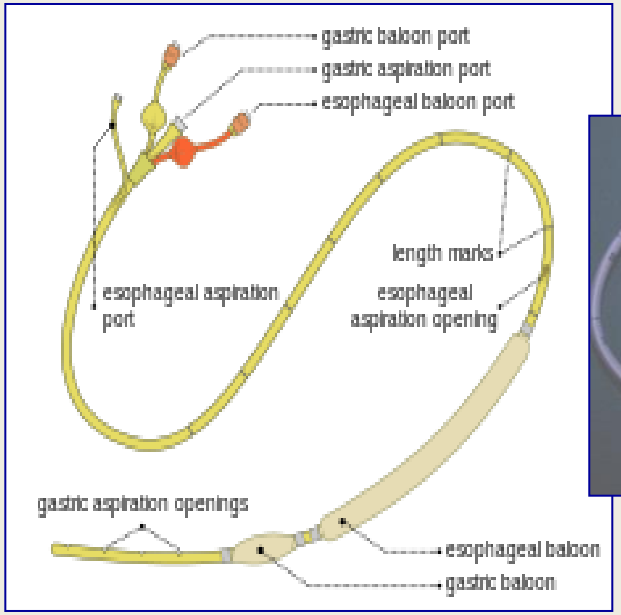
JGJ, male, 48 yo

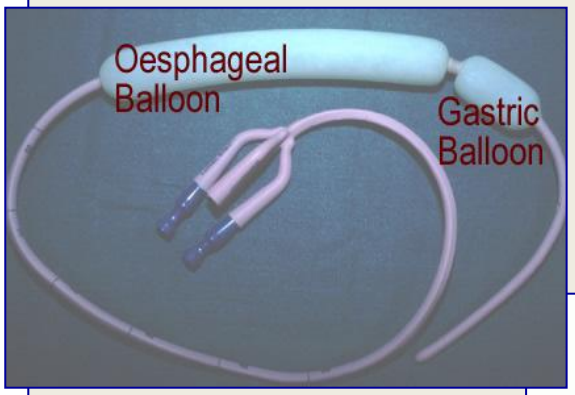
- known pré-existing chronic hepatic disease with EG varices
- ruptured proximal descending aortic aneurysm / emergency stent graft placement
- few hours later, massive bright red hematemesis
- **immediate treatment:**
  - **endotraqueal intubation**
  - **fluids**
  - **hemorrage control with a**
  - **Sengstaken-Blakemore tube**

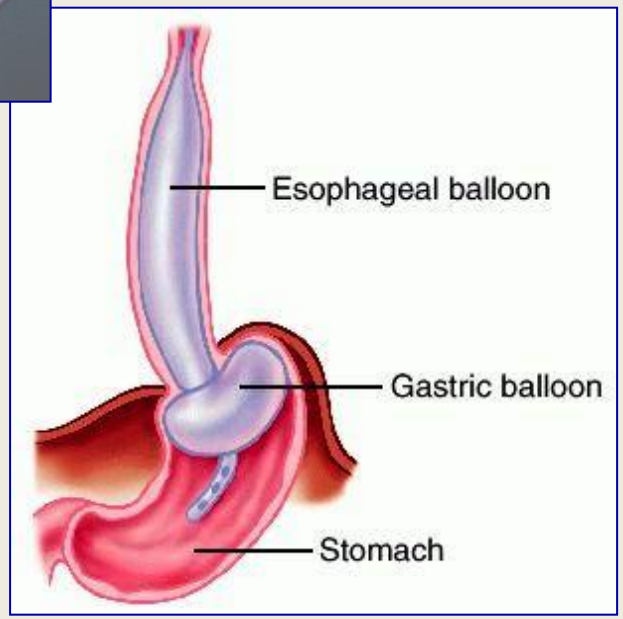




Sengstaken-Blakemore tube (modern version, Minnesota tube)







- rarely used at present
- flexible plastic tube containing internal channels and two inflatable balloons
- an opening at the stomach
- an opening at the upper esophagus

- **endoscopic control, next day, showed the origin of the bleeding was not the varices but an AORTOESOPHAGEAL FISTULA (AEF) related with the ruptured aneurism**

  - rare but life-threatening cause of upper GI bleeding
  - massive exsanguination
  - primary / secondary
  - majority secondary / setting of prior aortic reconstructive procedures
  - transient self limited “herald bleed” may precede exsanguination

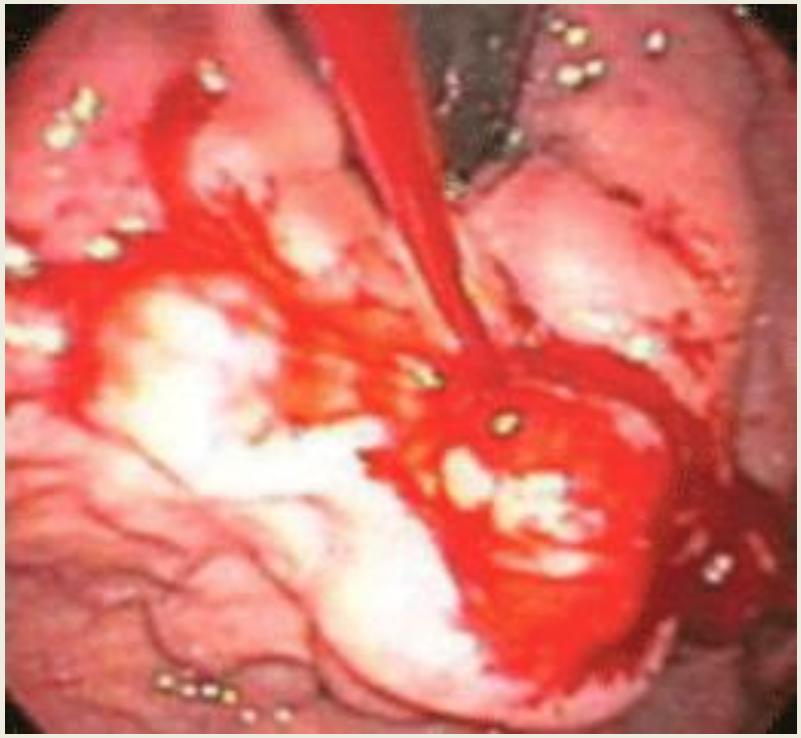
Sengstaken-Blakemore tube (modern version, Minnesota tube)

- unusual life-saving use of the Sengstaken-Blakemore tube
  - preventing fatal exsanguination from an AEF
- Sengstaken-Blakemore tube used far less commonly where endoscopic intervention is available
- Rare but devastating consequences from insertion and residence
  - esophageal and gastric ulceration and perforation
  - acute airway obstruction
  - bronchoesophageal fistula

Seet E, Beevee S, Cheng A, Lim E. *The Sengstaken-Blakemore tube: uses and abuses.* Singapore Med J. 2008. Aug;49(8):e195-7

UPPER GI BLEEDING

Presentation



- Hematemesis
- Melena
- Shock
- Typical course:
  - 80% stop spontaneously
  - 20% need endoscopy/angiography
  - <5% urgent operation needed

Management

It is not trauma but don't forget the ABC's!

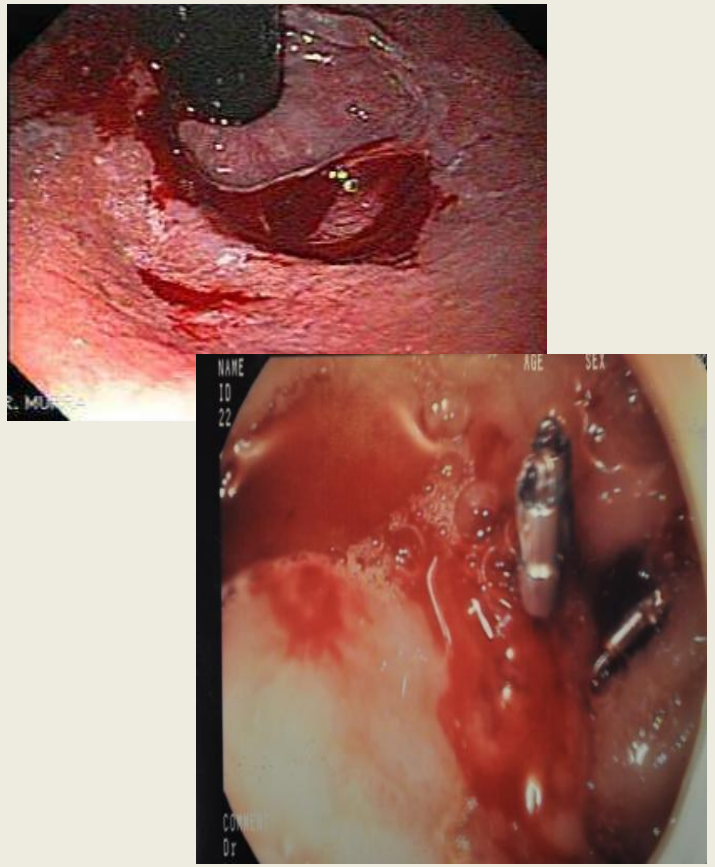
- **Protect the airway**
- **Hemodynamic stabilization**
- **Identification of the bleeding source**
- **Directed therapeutic measures**

Drugs

PPI	**Yes**
Octreotide	No
Antifibrinolytics (TXA)	No
rFVIIa	No
Antibiotics	No
Prokinetics	No
NGT (with lavage)	**Maybe**

Upper GI endoscopy

- diagnosis
- mainstay of treatment



Thermal coagulation

90-100% Bleeding Control

Epinephrine Injection

Clipping

Predictors of Rebleeding after Endoscopy

- Haemodynamic instability
- Active bleeding at endoscopy
- Ulcer size > 2 cm
- Ulcer in high lesser curve or post duodenum
- Hb level < 10 g/l
- Need for transfusion

UPPER GI BLEEDING

Angiography

- acute massive duodenal bleeding
- haemobilia
- Mallory Weiss
- tumours
- ...

Bleeding control rates 50-80%

Mesquita et al. XIX Congresso Nacional de Cirurgia. 1999
Loffroy R. World Journal of Gastroenterology. 2013

UPPER GI BLEEDING

Surgery: what to do?

- Timing is KEY
  - Not too early
  - Not too late
- Operation should be simple
  - Not too fancy
  - Not too resectional

Surgery

- oversew of bleeding ulcer
  - ligation of the GD duodenal artery?
- simple excision of a gastric ulcer
- rarely partial/total gastrectomy

Conclusions

- Careful history
- Early endoscopy / angiography
- Most UGI's you will never see
- Most UGI's you will never operate
- Pay attention to resuscitation
- Operate on time / Operate simply