

Quality care in Oesophageal Variceal Bleeding

Dinen Parbhoo
WDGMC
Liver Transplant Unit



Overview

- Screening
- Acute variceal bleed
 - Pre endoscopic Mx
 - Endoscopic therapy
 - Post endoscopic Mx
 - Rescue therapy
- Follow up

Who to Screen?

- Old guidelines: all cirrhotics

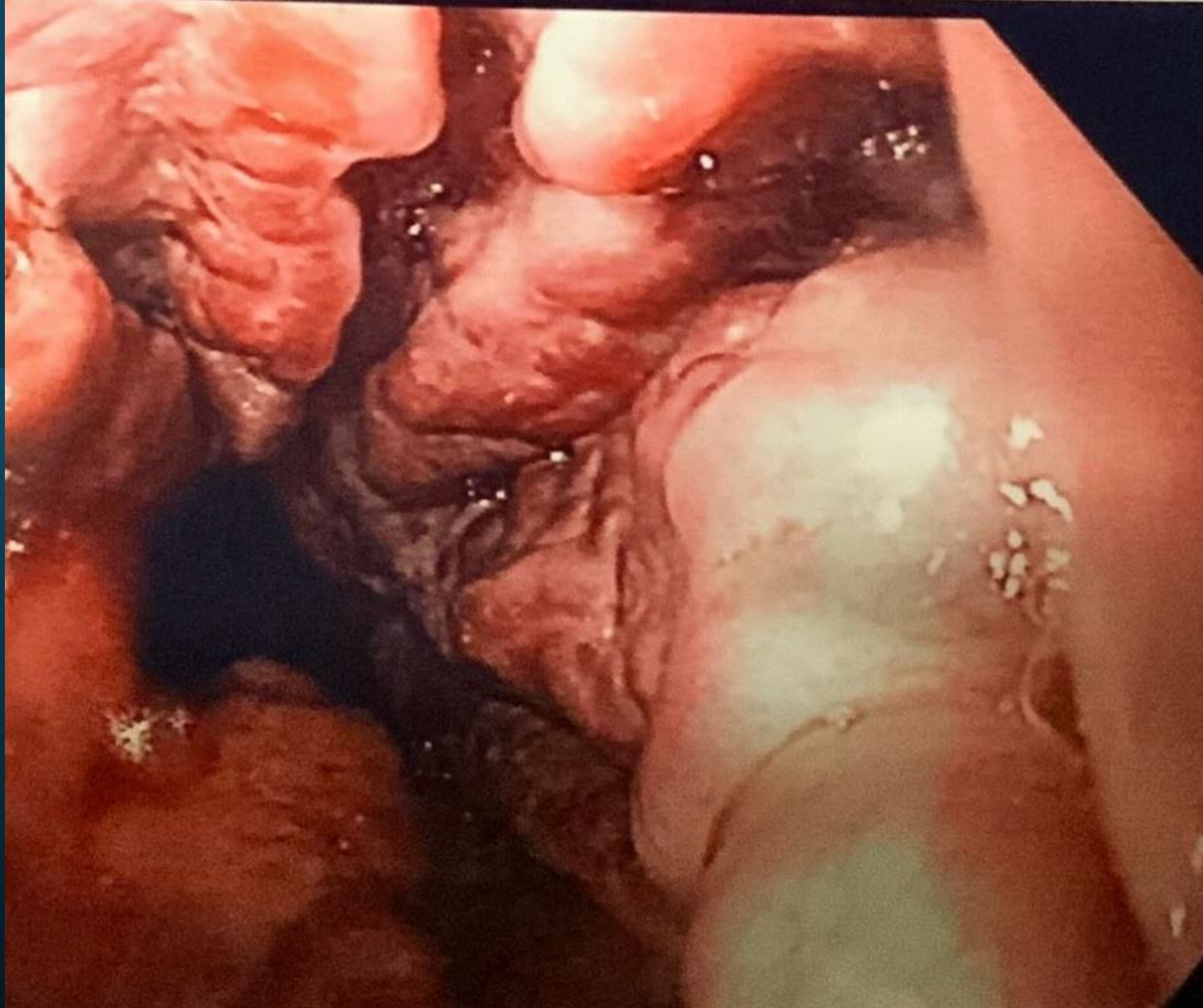
VS

- Decompensated ACLD (LSM $>20\text{kPa}$ or plt < 150)
- Compensated ACLD (LSM $>20\text{kPa}$ or plt <150)- and not on NSBB
- ACLD- compensated with LSM $<20\text{kPa}$ & plt >150 - no need for endoscopy
- ACLD with CSPH (HVWPG $> 10\text{mmHg}$ +/- kPa > 25)- NSBB
- If cannot tolerate NSBB- need endoscopy

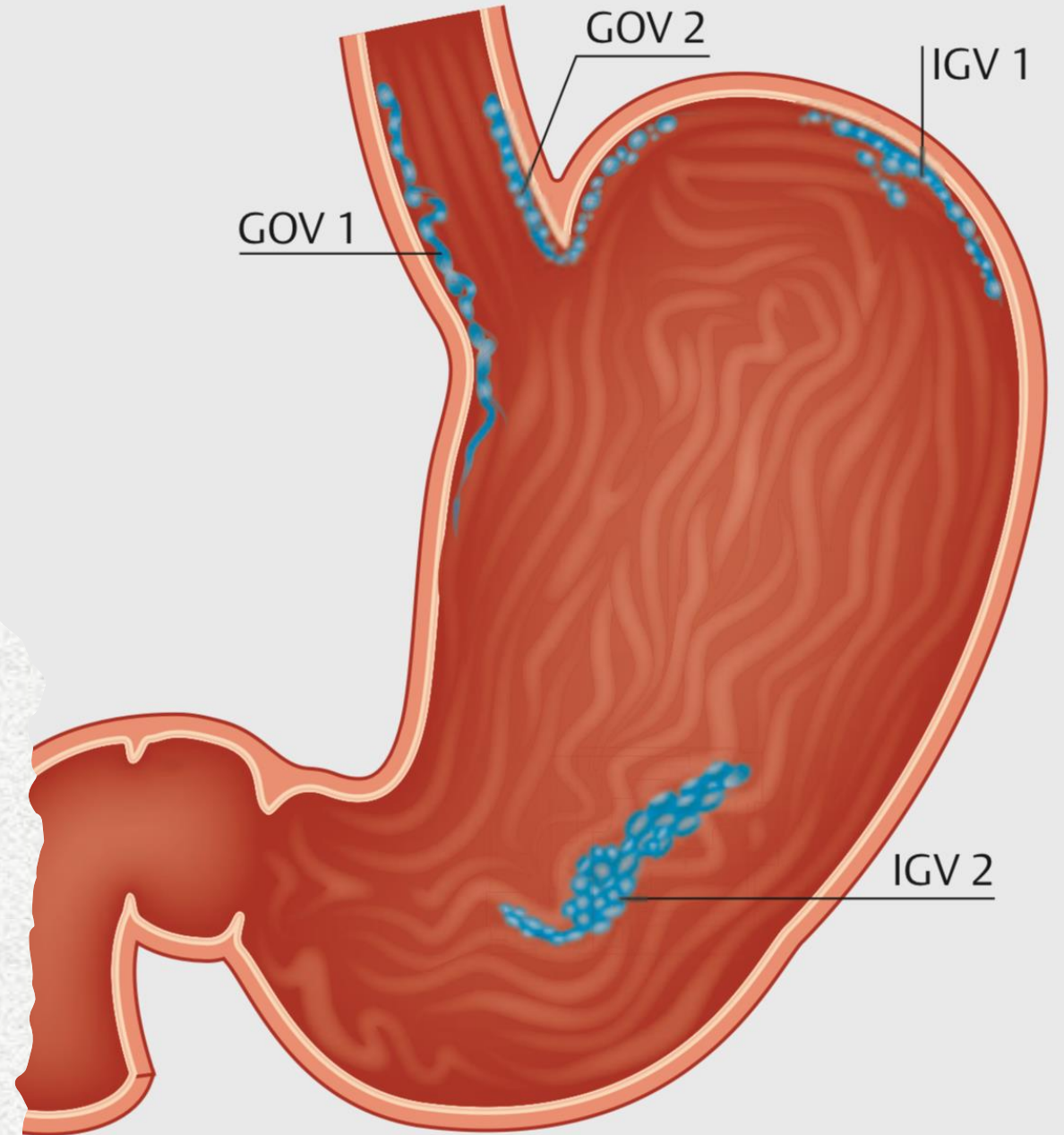
Documentation

- According to Baveno criteria:
 - Small, medium, large
 - Presence/ absence of red signs
- Gastric varices as per Sarin Classification
- VCE not recommended for oesophageal/ gastric varices

Oesophageal varices



Gastric varices- Sarin Classification



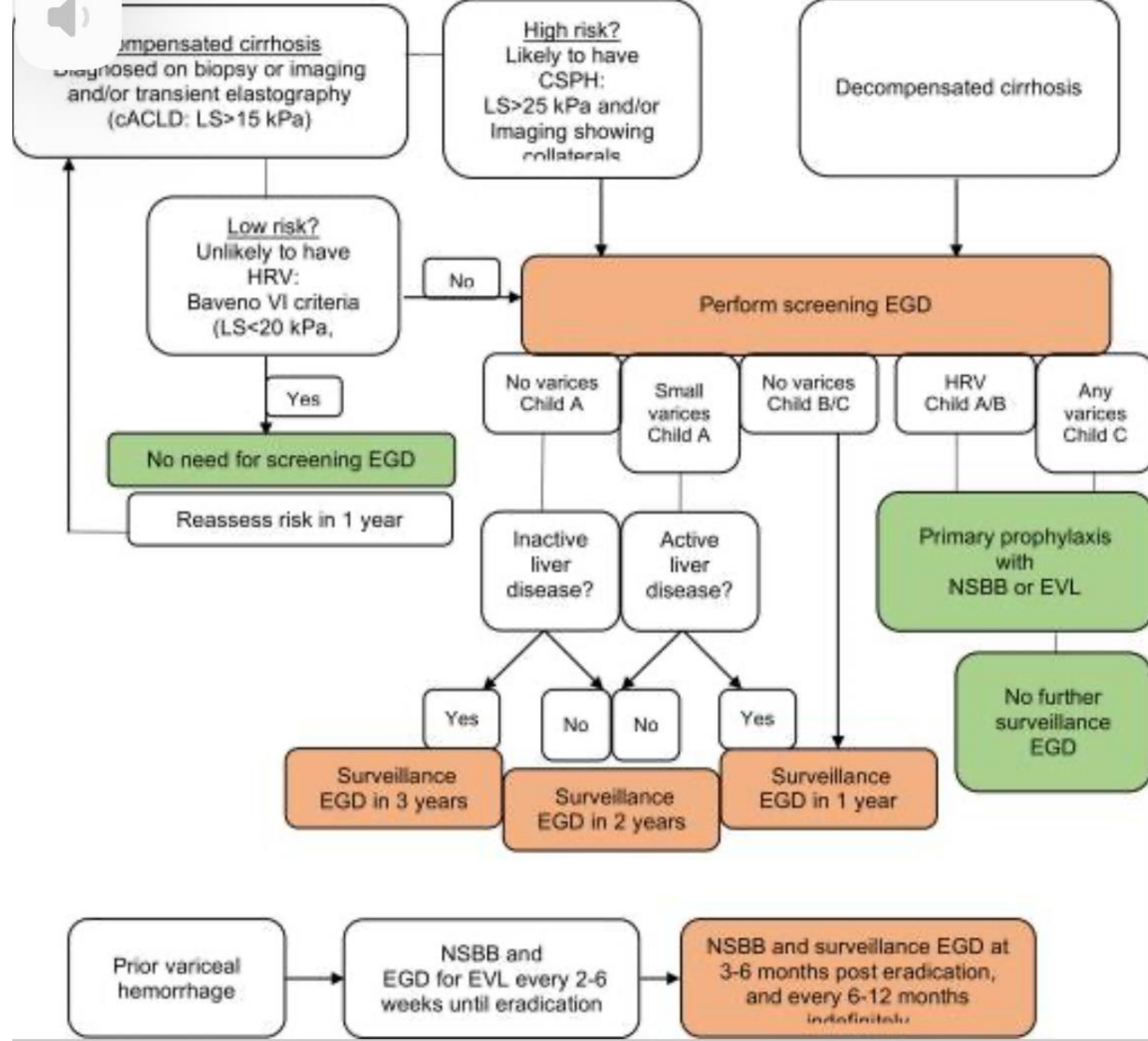


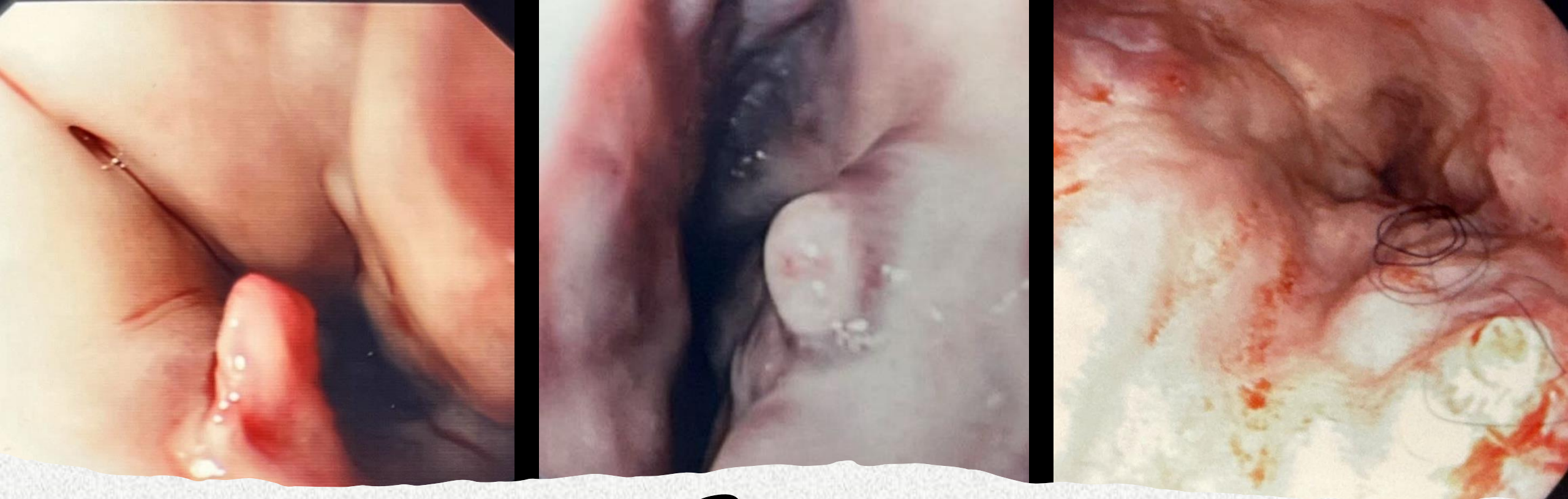
Follow-up of elective cases

- ESGE:
 - repeat EBL every 2-4 weeks-until variceal eradication
 - Then every 3-6mo in the first year
 - If no high risk varices on initial scope
 - Repeat in 2 years if active, ongoing liver disease
 - Repeat in 3 years if quiescent

But
sometimes







Acute Variceal
Haemorrhage

Pre-endoscopic Mx- in HCA/ICU

- Assess Haemodynamic status
- Volume replacement- to maintain perfusion- crystalloids\
- Terlipressin, octreotide, somatostatin- up to 5 days
- Antibiotics- Ceftriaxone 1g/ d- up to 7 days
- Restrictive Blood transfusion - trigger $< 7\text{g/dl}$, aim 7-9 (except cardiac trigger < 8 - aim for 10g/dl)
- No indication for:
 - Recombinant factor VIIa
 - FFP- no cut-off INR
 - Tranexamic acid
 - Platelets, no minimum Plt count

Endoscopy – within 12 hrs of presentation

- Intubate for airway protection- aim for extubation post endoscopy
- Treat as a full stomach
- IV Erythromycin 250mg given 30-120min prior
- Withhold anticoagulation & antiplatelet agents- restart based on individual risk benefit
- NO threshold for minimum platelet count or INR
- Therapy:
 - EBL- for oesophageal & GOV-1
 - Injection (cyanoacrylate/thrombin) for GOV-2 & IGV-1
 - No role for Haemostatic spray/ powder
 - SEMS > sengstaken tube for uncontrolled
 - NB- don't forget bleeding PHG/ GAVE- Rx: APC,RFA, EBL

Post endoscopy management

- Stop Ppi if bleed variceal
- Rapid removal of blood from Gi tract- Lactulose
- NSBB- once HD stable + EBL for secondary prophylaxis
- Repeat Endoscopy every 1-4 weeks for eradication
- Triple Phase CT- assess vasculature/ plan for TIPS/ excl HCC
- Cardiac eval- pre-TIPS
- Gastric varices- depends on local expertise
 - Endoscopy & cyanoacrylate injection
 - EUS coils plus cyanoacrylate
 - TIPS
 - BRTO

Poor prognostic features

- Child Pugh C
- Elevated MELD score
- Failure to achieve primary haemostasis

Rescue therapies

- Pre-emptive TIPS: within 24-72hrs
 - CTP B7-C13, after successful EBL with active bleeding despite vasoactive agents/ HVWPG >20mmHg
- Oesophageal varices:
 - SEMS > Balloon Tamponade - to bridge to TIPS
 - Early bleeding within 5d post EBL- try second endoscopic attempt
 - TIPS- aim to reduce portal pressure gradient < 12mmHg/ <50% pre TIPS
- Gastric varices:
 - Eus coils + cyanoacrylate
 - TIPS +/- embolization
 - BRTO
 - Surgical devascularization- high mortality

Initial evaluation and management of suspected esophageal variceal hemorrhage

- Hemodynamic resuscitation – initially using IV crystalloid fluids
- Use restrictive RBC transfusion policy
- Start vasoactive medication
- Give antibiotic prophylaxis
- Temporarily withhold antiplatelet agents and anticoagulants*
- Consider endotracheal intubation in selected at-risk patients[§]
- Consider giving an IV promotility agent prior to upper gastrointestinal endoscopy

Perform EGD within 12 hours of patient presentation
once adequately hemodynamically resuscitated

EVH confirmed
Perform risk stratification

Perform EBL

EVH controlled

1. Low risk of recurrent bleeding
 - a. continue vasoactive medication for up to 5 days and initiate/resume NSBB
 - b. schedule follow-up endoscopy within 1–4 weeks for repeat EBL for secondary prophylaxis
2. High risk of recurrent bleeding
 - a. consider pre-emptive TIPS within 72 hours (preferably within 24 hours)

Persistent EVH

Consider urgent rescue TIPS or esophageal stent (if available),
or tamponade balloon as a temporizing measure followed by
rescue TIPS

Recurrent EVH within the first 5 days

Second attempt at endoscopic
hemostasis or perform salvage TIPS

Initial evaluation and management of suspected gastric variceal hemorrhage

- Hemodynamic resuscitation – initially using IV crystalloid fluids
- Use restrictive RBC transfusion policy
- Start vasoactive medication
- Give antibiotic prophylaxis
- Temporarily withhold antiplatelet agents and anticoagulants*
- Consider endotracheal intubation in selected at-risk patients§
- Consider giving an IV pro motility agent prior to upper gastrointestinal endoscopy

Perform EGD within 12 hours of patient presentation
once adequately hemodynamically resuscitated

GVH confirmed
Classify gastric or gastroesophageal varices according to the Sarin classification

Perform endoscopic cyanoacrylate injection
Cyanoacrylate injection or EBL in patients with GOV1-specific bleeding
EUS-guided injection of coils + cyanoacrylate may be used in centers with expertise

GVH controlled

1. Continue vasoactive medication for up to 5 days and initiate/resume NSBB
2. For secondary prophylaxis, an individualized patient approach should be used based upon patient factors and local expertise
3. If patient is at high risk for rebleeding, consider pre-emptive TIPS

Persistent GVH

Urgent rescue TIPS or BRTO, or tamponade gastric balloon
as a temporizing measure followed by rescue TIPS or BRTO

Recurrent GVH within the first 5 days

TIPS or BRTO; or may consider relook
endoscopy with EUS-guided injection
of coils + cyanoacrylate in centers
with expertise

Thank You...

