



Baveno VI

CONSENSUS

April 10-11, 2015
Baveno, Italy

Management of the acute bleeding episode

Blood volume restitution

The goal of resuscitation is to preserve tissue perfusion. Volume restitution should be initiated to restore and maintain hemodynamic stability.

Packed red blood cells transfusion should be done conservatively at a target haemoglobin level between 7 and 8 g/dl, although transfusion policy in individual patients should also consider other factors such as cardiovascular disorders, age, hemodynamic status and ongoing bleeding (1b;A).

Recommendations regarding management of coagulopathy and thrombocytopenia cannot be made on the basis of currently available data (5;D).

PT/INR is not a reliable indicator of the coagulation status in patients with cirrhosis (1b;A).

Antibiotic prophylaxis

Antibiotic prophylaxis is an integral part of therapy for patients with cirrhosis presenting with upper gastrointestinal (GI) bleeding and should be instituted from admission (1a;A).

The risk of bacterial infection and mortality are very low in patients with Child-Pugh A cirrhosis (2b;B), but more prospective studies are needed to assess whether antibiotic prophylaxis can be avoided in this subgroup of patients.

Individual patient risk characteristics and local antimicrobial susceptibility patterns must be considered when determining appropriate first line acute variceal haemorrhage antimicrobial prophylaxis at each centre (5;D).

Intravenous ceftriaxone 1 g/24 h should be considered in patients with advanced cirrhosis (1b;A), in hospital settings with high prevalence of quinolone-resistant bacterial infections and in patients on previous quinolone prophylaxis (5;D).

Prevention of hepatic encephalopathy

Recent studies suggest that either lactulose or rifaximin may prevent hepatic encephalopathy in patients with cirrhosis and upper GI bleeding (1b;A). However, further studies are needed to evaluate the risk/benefit ratio and to identify high risk patients before a formal recommendation can be made (5;D).

Although, there are no specific studies in acute variceal bleeding, it is recommended to adopt the recent EASL/

AASLD HE guidelines which state that episodic HE should be treated with lactulose (25 ml q 12 h until 2–3 soft bowel movements are produced, followed by dose titration to maintain 2–3 soft bowel movements per day) (5;D).

Assessment of prognosis

Child-Pugh class C, the updated MELD score, and failure to achieve primary haemostasis are the variables most consistently found to predict six week mortality (2b;B).

Pharmacological treatment

In suspected variceal bleeding, vasoactive drugs should be started as soon as possible, before endoscopy (1b;A).

Vasoactive drugs (terlipressin, somatostatin, octreotide) should be used in combination with endoscopic therapy and continued for up to five days (1a;A).

Hyponatremia has been described in patients under terlipressin, especially in patients with preserved liver function. Therefore, sodium levels must be monitored (1b;A).

Endoscopy

Following hemodynamic resuscitation, patients with upper GI bleeding and features suggesting cirrhosis should undergo esophagogastroduodenoscopy within 12h of presentation (5;D).

In the absence of contraindications (QT prolongation), pre-endoscopy infusion of erythromycin (250 mg IV 30–120 min before endoscopy) should be considered (1b;A).

The availability both of an on-call GI endoscopist proficient in endoscopic haemostasis and on-call support staff with technical expertise in the usage of endoscopic devices enables performance of endoscopy on a 24/7 basis and is recommended (5;D).

Patients with acute variceal haemorrhage should be considered for ICU or other well monitored units (5;D).

In patients with altered consciousness, endoscopy should be performed with protection of the airway (5;D).

Ligation is the recommended form of endoscopic therapy for acute oesophageal variceal bleeding (1b;A).

Endoscopic therapy with tissue adhesive (e.g. N-butyl-cyanoacrylate) is recommended for acute bleeding from isolated gastric varices (IGV) (1b;A) and those gastroesophageal varices type 2 (GOV2) that extend beyond the cardia (5;D).

To prevent rebleeding from gastric varices, consideration should be given to additional glue injection (after two to four weeks), beta-blocker treatment or both combined or TIPS (5;D). More data in this area are needed.

EVL or tissue adhesive can be used in bleeding from gastroesophageal varices type 1 (GOV1) (5;D).

Early TIPS placement

An early TIPS with PTFE-covered stents within 72 h (ideally <24 h) must be considered in patients bleeding from EV, GOV1 and GOV2 at high risk of treatment failure (e.g. Child-Pugh class C <14 points or Child-Pugh class B with active bleeding) after initial pharmacological and endoscopic therapy (1b;A). Criteria for high risk patients should be refined.

Balloon tamponade

Balloon tamponade, given the high incidence of its severe adverse events, should only be used in refractory oesophageal bleeding, as a temporary "bridge" (for a maximum of 24 h) with intensive care monitoring and considering intubation, until definitive treatment can be instituted (5;D).

Use of self-expandable metal stents

Data suggest that self-expanding covered oesophageal metal stents may be as efficacious and a safer option than balloon tamponade in refractory oesophageal variceal bleeding (4;C).

Management of treatment failures

Persistent bleeding despite combined pharmacological and endoscopic therapy is best managed by PTFE-covered TIPS (2b;B).

Rebleeding during the first five days may be managed by a second attempt at endoscopic therapy. If rebleeding is severe, PTFE-covered TIPS is likely the best option (2b;B).

Research agenda

Trials of preventative strategies in acute kidney injury in variceal bleeding should be undertaken.

Treatment and prevention of HE.

Optimal use of glue obliteration in gastric variceal bleeding.

Role of endoscopic ultrasound in variceal injection therapy.

Alternative endoscopic haemostasis techniques in EVB, e.g., haemostatic powders.

Improve prognostic models: Better stratification of risk to determine applicability of updated MELD or other potential new models to improve stratification of risk to determine type of treatment.

Applicability of models to determine other issues such as timing of the initial endoscopy, duration of the drug therapy and type of treatment.

Use of early TIPS in gastric varices.

Use of balloon occluded retrograde transvenous obliteration (BRTO) in IGTV.

de Franchis, R. Expanding consensus in portal hypertension: Report of the Baveno VI Consensus Workshop: Stratifying risk and individualizing care for portal hypertension. *Journal of Hepatology* **63**, 743-752 (2015).



Danis Procedure Pack

SX-ELLA Stent Danis

The only stent developed and designed specially for the purpose of stopping esophageal variceal bleeding

ELLA-CS, s.r.o.

Milady Horákové 504/45, Trebes,
Hradec Králové, 500 06,
Czech Republic

phone: +420 495 279 111

e-mail: info@ellacs.eu

web: www.ellacs.eu

Features

- Easy to operate emergency device
- Instant hemostasis through direct compression of varices
- Easy implantation without the need for endoscopy or fluoroscopy
- Easy endoscopic stent removal after 7 days

Benefits

- Reduced migration due to special stent design
- Standardized compression of the esophageal varices with safe and effective hemostasis
- Oral intake maintained from the time of implantation
- Possibility of endoscopic examination through the implanted stent
- Special device "ELLA Extractor" for non-traumatic and easy extraction of the stent

