Screening for Varices and Prevention of Bleeding

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Outline

- Pathophysiology and portal dynamics
- Indications and methods for variceal screening
- Prophylaxis of variceal bleeding
Pathophysiology and Portal Dynamics
Pathophysiology and Portal Dynamics
Varices
When Do Varices Bleed?

Fig. 1. HVPGs in patients with alcoholic cirrhosis with and without variceal hemorrhage are shown. None of the patients that bled from varices had an HVPG <12 mm Hg.

Viallet et al, Gastroenterology, 1975
Cirrhosis

Prevalence

35%-80%

Risk of Bleeding: Esophageal Varices

Risk of Bleeding

25%-40%

Survive

50%-70%

Rebleed

70%

Die

30%-50%
Indications and Methods for Variceal Screening
Variceal Surveillance

Esophagogastroduodenoscopy (EGD)

- **No varices**
  - Repeat endoscopy in 3 years (well compensated);
  - in 1 year if decompensated
  - No β-blocker prophylaxis

- **Small varices (<5 mm), Child class B/C**
  - Nonselective β-blocker prophylaxis

- **Medium or large varices**
  - Child Class A, no red wales – Nonselective β-blockers
  - Child class B/C, red wales – nonselective β-blockers or band ligation

AASLD Practice Guidelines 2007
Prophylaxis of Variceal Bleeding
Prophylaxis of Variceal Bleeding

- Nonselective beta-blockers
- Esophageal banding or sclerotherapy
- Transjugular intrahepatic portosystemic shunt (TIPSS)
- Surgical shunt
- Liver transplantation
Summary

- Hepatic fibrosis leads to increased portal pressure
- Increased portal pressure drives shunting of blood to create varices
- High pressure and thin-walled vessels lead to bleeding
- Prevention of bleeding can be achieved by lowering pressure in the splanchnic system or by eradication of varices
  - Beta-blockers
  - Banding
  - Shunt procedures
End

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