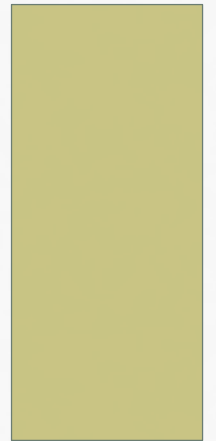


# PORTAL HYPERTENSION

MAZEN HASSANAIN



# CAUSES

- Cirrhosis
- Non-cirrhosis

## Classification of noncirrhotic portal hypertension

<b>Prehepatic</b>
Portal vein thrombosis
Splenic vein thrombosis
Splanchnic arteriovenous fistula
Splenomegaly (lymphoma, Gaucher's disease)
<b>Intrahepatic</b>
<b>Presinusoidal</b>
Schistosomiasis
Idiopathic portal hypertension/Noncirrhotic portal fibrosis/Hepatoportal sclerosis
Primary biliary cirrhosis
Sarcoidosis
Congenital hepatic fibrosis
Sclerosing cholangitis
Hepatic arteriopetal fistula
<b>Sinusoidal</b>
Arsenic poisoning
Vinyl chloride toxicity
Vitamin A toxicity
Nodular regenerative hyperplasia
<b>Postsinusoidal</b>
Sinusoidal obstruction syndrome (Veno-occlusive disease)
Budd-Chiari syndrome
<b>Posthepatic</b>
IVC obstruction
Cardiac disease (constrictive pericarditis, restrictive cardiomyopathy)

# SYMPTOMS

- Asymptomatic
- Complications
  - Gastroesophageal varices
  - Ascites
  - Splenomegaly
  - Underlying disease

# BLEEDING PREVENTION

- Approximately one-third of all patients with varices will develop variceal hemorrhage
- A major cause of morbidity and mortality in patients with cirrhosis
- AASLD RECOMMENDATIONS — Recommendations for prevention of variceal bleeding have been issued by the American Association for the Study of Liver Diseases

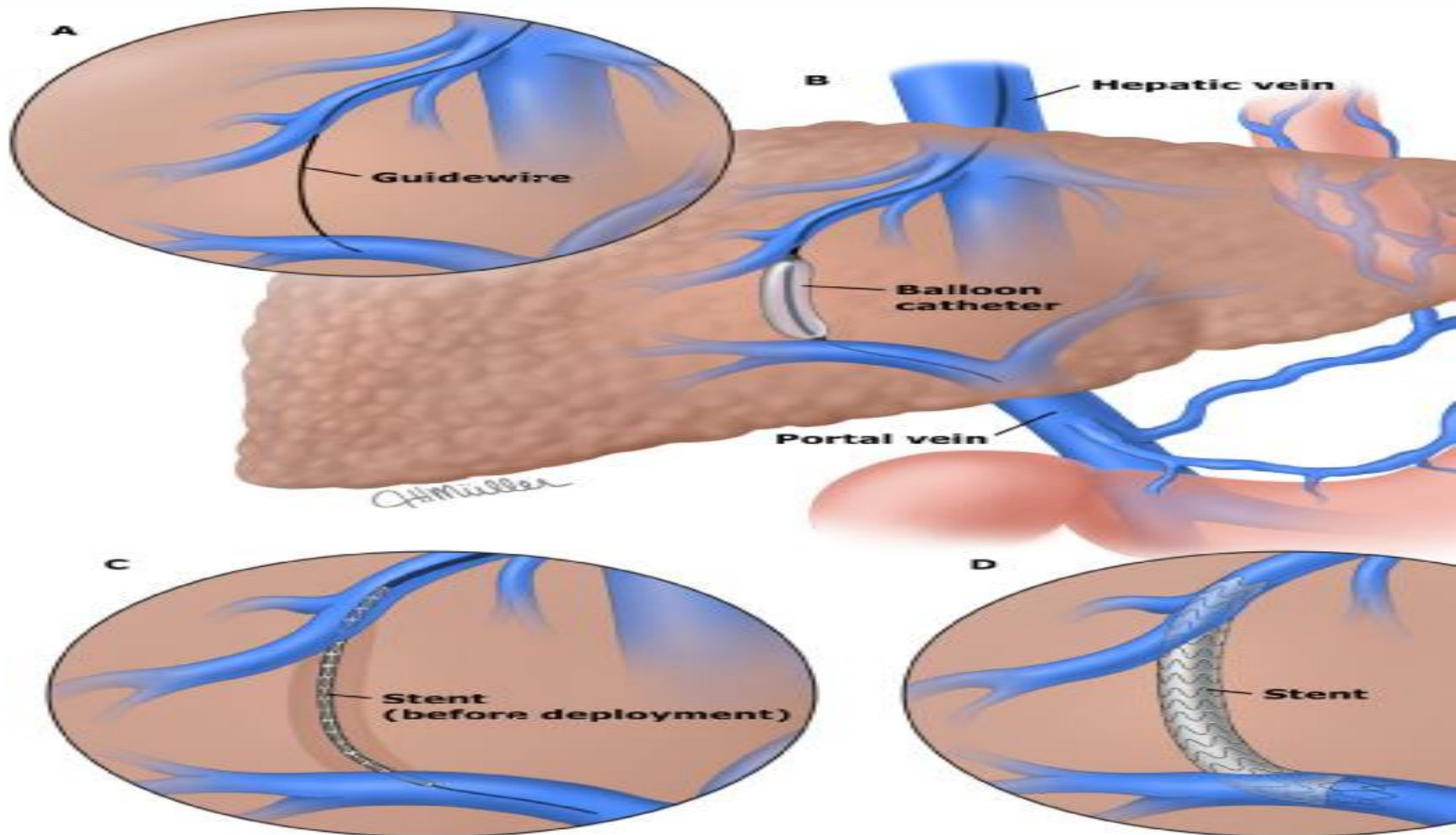
# TREATMENT OF BLEEDING

- Initial therapy: hemodynamic resuscitation, prevention and treatment of complications
- Prophylactic antibiotics, preferably before endoscopy (although effectiveness has also been demonstrated when given after).
- Suggest intravenous ceftriaxone (1 g IV) or Cipro (400 mg IV BID)
- UGD should be performed for diagnosis and possible treatment
- Octreotide (50 mcg bolus followed by 50 mcg/hour by intravenous infusion) where terlipressin is unavailable

# CONTINUE

- Salvage treatment
  - TIPS (transjugular intrahepatic portosystemic shunt)
  - Surgery in well preserved liver function who fails emergent endoscopic treatment and has no complications from the bleeding or endoscopy.
  - The choice of surgery usually depends upon the availability, training, and expertise of the surgeon. Although a selective shunt has some physiologic advantages, it may significantly exacerbate marked ascites.

## Transjugular intrahepatic portosystemic shunt



A transjugular intrahepatic portosystemic shunt (TIPS) is created by passing a needle catheter via the transjugular route into the liver and wedging it there. The needle is then extruded and advanced through the liver parenchyma to the intrahepatic portion of the portal vein. A stent is placed between the portal and hepatic veins. A TIPS is a side-to-side surgical portacaval shunt, but does not require general anesthesia or major surgery for placement. (A) Passage of a needle catheter between the hepatic vein and the portal vein. (B) Inflation of the balloon catheter within the liver to dilate the tract between the hepatic vein and the portal vein. (C) Deployment of the stent. (D) Stent in its final position.



# LIVER RESECTION

- Indications:
  - Benign:
    - Tumor
      - Adenoma
  - Malignant:
    - Primary:
      - HCC
      - CC
    - Mets:
      - CRCLM

# LIVER RESECTION

- Outcomes
  - Benign
  - Malignant
- What's resectable
  - How much liver
  - Can we do anything else

# HCC VS. CRCLM

- Background liver
- Associated morbidities
- Transplant options

# LIVER RESECTION

- Complications
  - Liver Failure
  - Bleeding
  - Bile leaks
  - Infection (wound, deep abscess)
  - General complications

# LIVER RESECTION

- Types of resections

