Esophageal Varices
Esophageal Varices

- **Esophageal varices** are extremely dilated submucosal veins in the lower third of the esophagus. They are most often a consequence of portal hypertension.
- They are liable to rupture causing fatal bleeding.
- Resemble varicose veins that some people have in their legs.
Esophageal Varices

Causes

The causes of oesophageal varices are anything that can cause portal hypertension. Some examples are follow:

Pre-hepatic

- Portal vein thrombosis.
- Portal vein obstruction - congenital atresia/stenosis.
- Increased portal blood flow - fistula.
- Increased splenic flow.
Esophageal Varices

Causes

- Intra-hepatic
  - Cirrhosis due to various causes, including alcoholic, chronic hepatitis (e.g. viral or autoimmune).
  - Acute hepatitis (especially alcoholic).
  - Schistosomiasis.
  - Congenital hepatic fibrosis.
  - Myelosclerosis.
Esophageal Varices

Causes

- Post-hepatic
  - Compression (e.g. from tumour).
  - Budd-chiari syndrome.
  - Constrictive pericarditis (and rarely right-sided heart failure).
Esophageal Varices  
Pathogenesis

- Portal hypertension results in the development of collateral channels at sites where the portal and caval systems communicate. Although these collateral veins allow some drainage to occur, they lead to development of a congested subepithelial and submucosal venous plexus within the distal esophagus.

- These vessels, termed varices
Esophageal Varices

**Grossly**

- Linear violaceous or red protrusions into the distal esophagus representing dilated submucosal veins
- Overlying mucosa is generally intact but may show evidence of inflammation primarily erythema
- The surface may show superficial erosions
- If variceal rupture occurs the esophagus is filled with blood and occasionally a blood clot may be found over the site of rupture
- In the resected surgical and postmortem specimen the varices collapse and a flattened violaceous linear vascular outline is seen
Inside-out esophagus (Mucosa)
Esophageal varices

Microscopically

- Markedly dilated submucosal veins are present
- The overlying esophageal mucosa is generally normal
- Partial thrombosis of varying age may be seen in the varices
The End