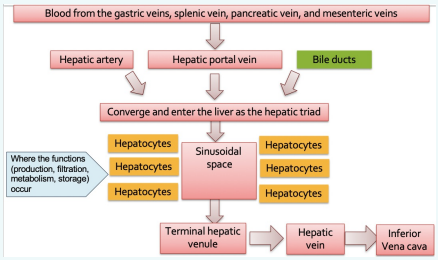
Cirrhosis & Pancreatitis Cheat Sheet

by Shelbi (kfisher17) via cheatography.com/79317/cs/23634/

Hepatic Blood Flow



What is Cirrhosis?

Significant damage to the liver, resulting in healthy tissue being replaced with scar tissue

Direct Damage to Hepatocytes Results In:	Inflammatory response
	Collagen and fibrotic tissue deposited within sinusoids, making blood flow difficult
	Remodeling of hepatic lobules
Increased resistance within hepatic lobule:	Due to fibrotic scar tissue within the sinusoid and increased vasoconstriction

Splanchnic blood vessels dilate, resulting in increased blood volume

Hepatic Fibrosis

Causes of Cirrhosis

Alcohol	*Primary*
Infections	Viral hepatitis
Disease states	Wilson's disease, cystic fibrosis, hemochromatosis, chronic biliary obstruction, autoimmune biliary cirrhosis, nonalcoholic steatohepatitis (NASH)
Medications	MTX, amiodarone, dronedarone, APA (*high doses*)

Alcohol and infections account for ~80% of cirrhosis cases

Pathophysiology of Cirrhosis

Scar tissue and fibroids are laid down in the sinusoidal space, resulting in an increased pressure due to blocked blood flow.

Scar tissue and fibroids will infiltrate the hepatocytes, disrupting the tissue and architecture of the liver.

An imbalance exists between vasoconstrictors and vasodilators. Vasoconstrictors are working in the liver, which causes blood to back up into the intra-abdominal vessels and blood pooling into the intra--abdominal space.

Vasodilators work in the intra-abdominal vessels (splenic vasculature), which causes more blood to pool in the abdomen, but can't progress through the liver due to the vasoconstrictors.

Outcome of Cirrhosis

Liver is unable to perform normal functions

Filtration	Not able to effectively remove toxins, pathogens, or debris from the blood
Production	Decreased production of albumin, clotting factors (which can result in bleeding complications), and bile (may lead to digestive issues)
Metabolism	*Think CYP Enzymes*
	Impaired processing of drugs, hormones, and ammonia (the natural breakdown of protein taken from the GI tract)