

Components of the foregut:

From the pharynx, oesophagus, stomach, and half of the duodenum, liver, pancreas and spleen derive from the foregut.

Supply:

- Arterial

- Thoracic components e.g. oesophagus supplied by thoracic artery and aorta
- Abdominal components e.g. stomach and duodenum supplied by the coeliac trunk

- Venous

- Thoracic drainage into the systemic circuit e.g. jugular veins
- Abdominal drainage into hepatic portal system

- Nerves

- Parasympathetic nerve: Vagus
- Sympathetic: Greater splanchnic nerve, synapse in collateral ganglia in the coeliac plexus
- ENS in the walls of the gut

- Mesentery

- Liver grow from the foregut into ventral mesentery
- Mesentery anterior to the liver is falciform ligament, posterior to the liver called lesser omentum, dorsal to the stomach is the greater omentum
- Free margin of ventral mesentery inferior to the liver, contains ligamentum teres, the remanent of the umbilical cord
- Dorsal mesentery hang from the stomach downwards to cover the intestines, form a 4-layered structure,

- Lesser sac

- Lesser omentum between the stomach and the liver creates the lesser sac, the free margin contains the bile duct, hepatic portal vein and proper hepatic artery. Entry into the lesser sac called epiploic foramen.
- Posterior wall of the lesser sac: superior to inferior structures: Coeliac trunk&IVC, pancreas, transverse colon

Coeliac trunk

- Splenic artery
- Left gastric artery
- Common hepatic artery: give rise to the proper hepatic artery, some stomach artery

Stomach:

- Cardiac region (weaker cardiac sphincter) - Fundus - Body - Antrum - Pylorus
- Greater curvature and lesser curvature
- Three branches from the coeliac trunk all contribute to blood supply of the stomach: cha, lga, sa, form anastomosis along the curvatures of the stomach
- Gastric veins, gastro-omental veins, splenic vein drain into the portal vein

Liver

- 4 Lobes: Left, right, caudate, quadrate.
- Ligaments:
 - falciform ligament: between L/R, contains ligamentum teres, remenant of umbilical vein
 - coronal ligament around the bare area on top contacting diaphragm, liver grow through parietal peritoneum, location of hepato-systemic anastomosis

- Porta Hepatis: where blood vessels enters the liver, contains proper hepatic artery, hepatic portal vein and common bile duct.
- Supplied by the proper hepatic artery from the porta hepatis, drained by hepatic vein joining IVC superior to bare area
- Biliary tree: L & R hepatic duct join to form common hepatic duct, cystic duct connect common hepatic duct to the gall bladder, concentrate and store bile. Common bile duct connect cystic duct & common hepatic duct to the duodenum, joined by pancreatic duct.

Pancreas

- Components: Head on the right, tail across the duodenum, tip of the tail rest into the spleen, head wraps around the superior mesentery artery and vein
- Grow as dorsal and ventral parts during development, Ventral part rotate around the duodenum to join the dorsal part