

Gallbladder and Biliary System

Chapter 7

New Terminology

Combining Form	Meaning	Example	Meaning of New Term
Bil/i	Bile	Biliary	Pertaining to bile
Chol/e	Bile/gall	Cholecystitis	Inflammation of the gallbladder
Cholangi/o	Bile duct	Cholangiography	Process of recording a bile duct
Cholecyst/o	Gallbladder	Cholecystectomy	Excision or surgical removal of the gallbladder

New Terminology

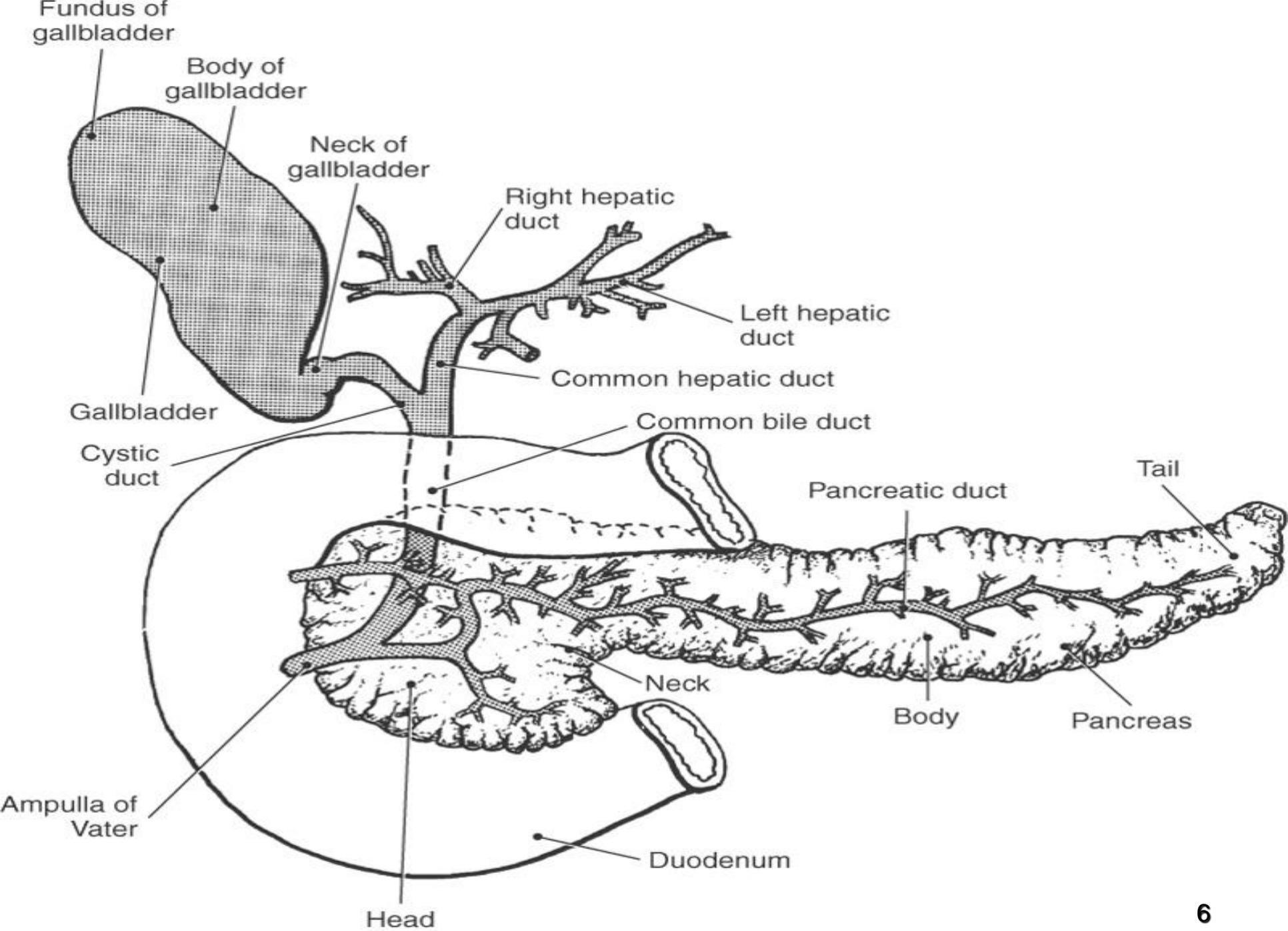
Combining Form	Meaning	Example	Meaning of New Term
Choledoch/o	Common Bile Duct	Choledocholith	Stone of the common bile duct
Pancreat/o	Pancreas	Pancreatitis	Inflammation of the pancreas
Pept/o	Digestion	Peptic	Pertaining to digestion

Biliary System

- **Composed of:**
 - **GB**
 - **Bile ducts**
 - **Intrahepatic**
 - **Extrahepatic**
- **Drains liver of bile**
- **Stores bile to later aid in digestion**

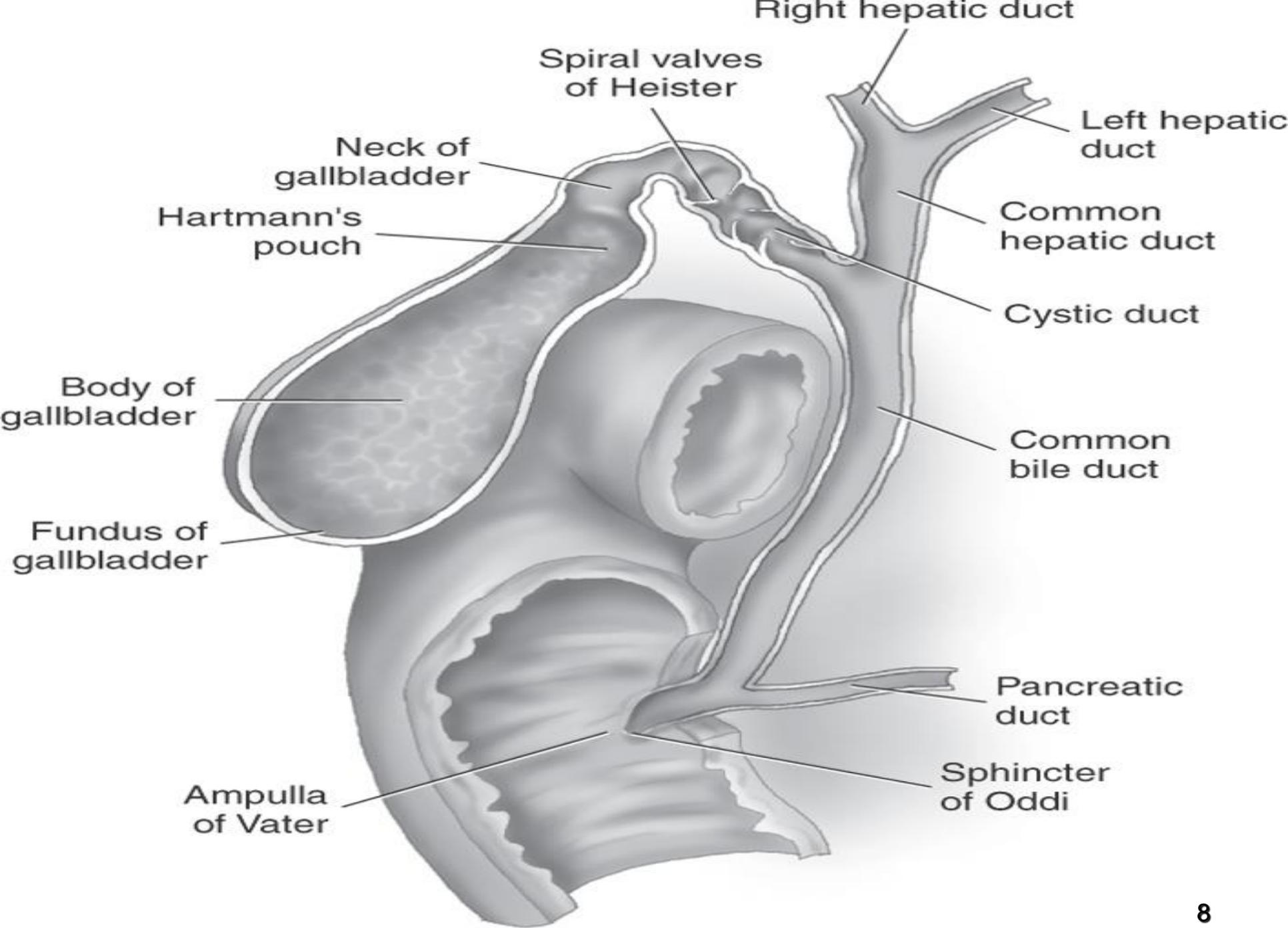
Gallbladder

- **Located in GB fossa**
 - **Anteroinferior portion of RLL**
 - **Assoc. with Main Lobar Fissure (MLF)**
- **Warehouse**
 - **Stores and concentrates bile**
- **3 Sections**
 - **Neck**
 - **Body**
 - **Fundus**



Cystic Duct

- **The continuation of the neck**
- **Neck contains**
 - **Circular muscles (creates spiral folds within mucosa)**
 - **Spiral valves of Heister**
 - **Prominent at bend of neck/cystic duct**
 - **Common area of impaction**



GB

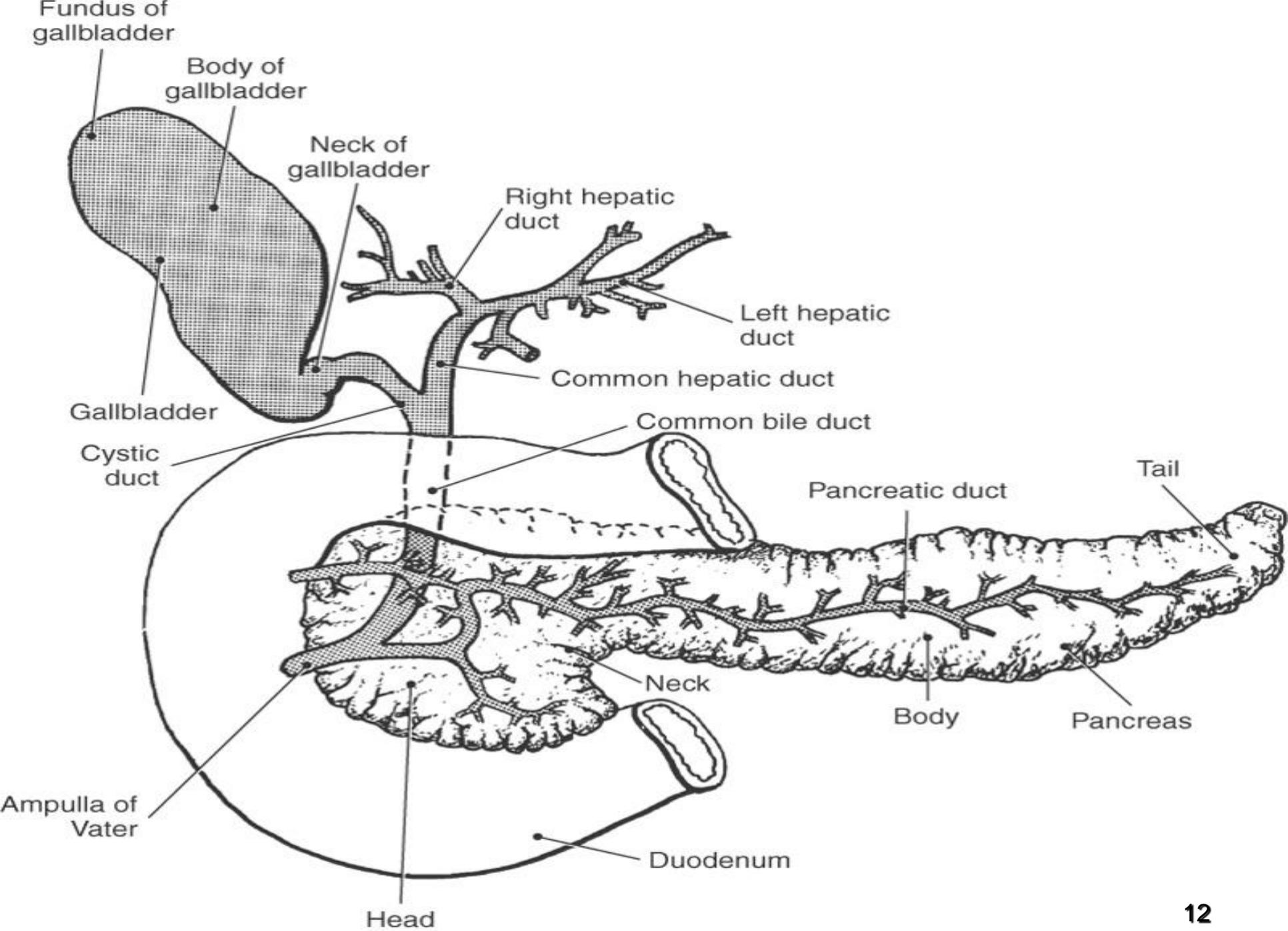
- **Muscular wall that contracts**
 - **Forces bile through extrahepatic ducts**
 - **Bile travels to duodenum**
 - **Aids in digestion**
- **Liver produces bile**
 - **Intrahepatic ducts take bile to GB**

Intrahepatic Ducts

- **Run along side**
 - **Hepatic arteries**
 - **Portal veins**
- **Right & Left hepatic ducts**
 - **Are formed by Small ducts from the periphery**
 - **Unite at porta hepatis to form CHD**
 - **Start of extrahepatic biliary system**

Porta Hepatis

- **Central area of liver where the following enter/exit:**
 - **Portal Vein (PV)**
 - **Common Bile Duct (CBD)**
 - **Hepatic Artery (HA)**



CHD

- **Anterior to Portal Vein**
- **Lateral to Hepatic Artery**
- **Joins with the Cystic Duct**
 - **Now becomes the CBD**

CBD

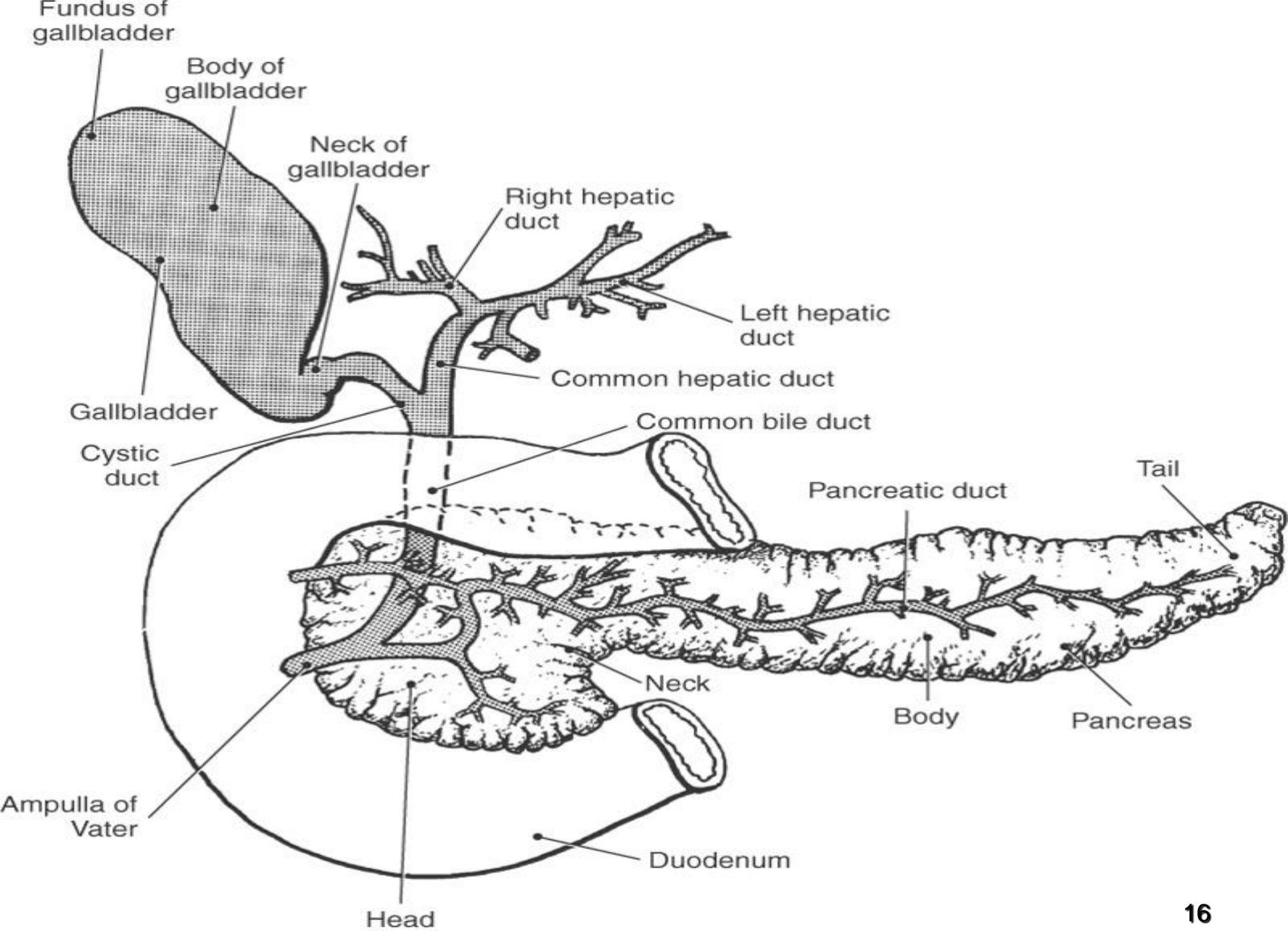
- **Courses posterior and medial**
 - **To the first part of duodenum**
 - **Behind Pancreatic Head**

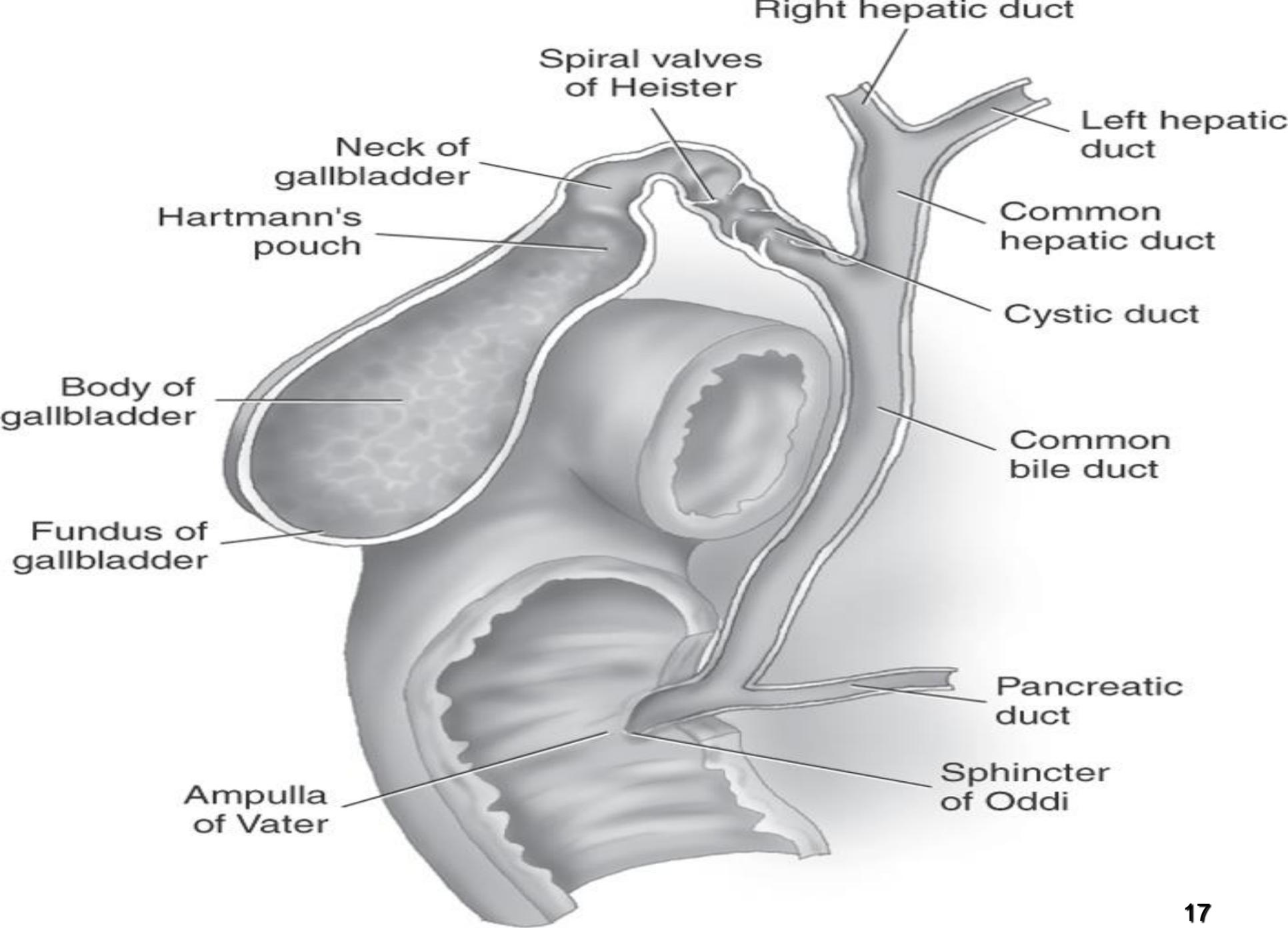
■ **Posterior**

- **Follows a groove on the posterior surface of pancreatic head**

CBD

- **Pierces medial wall to the second part of duodenum**
 - **Along with Main Pancreatic Duct**
 - **Also known as Duct of Wirsung**
 - **Through the ampulla of Vater**
- **Sphincter of Oddi**
 - **Circular muscle fibers that guard the ampulla of Vater**





Falciform Ligament

CBD

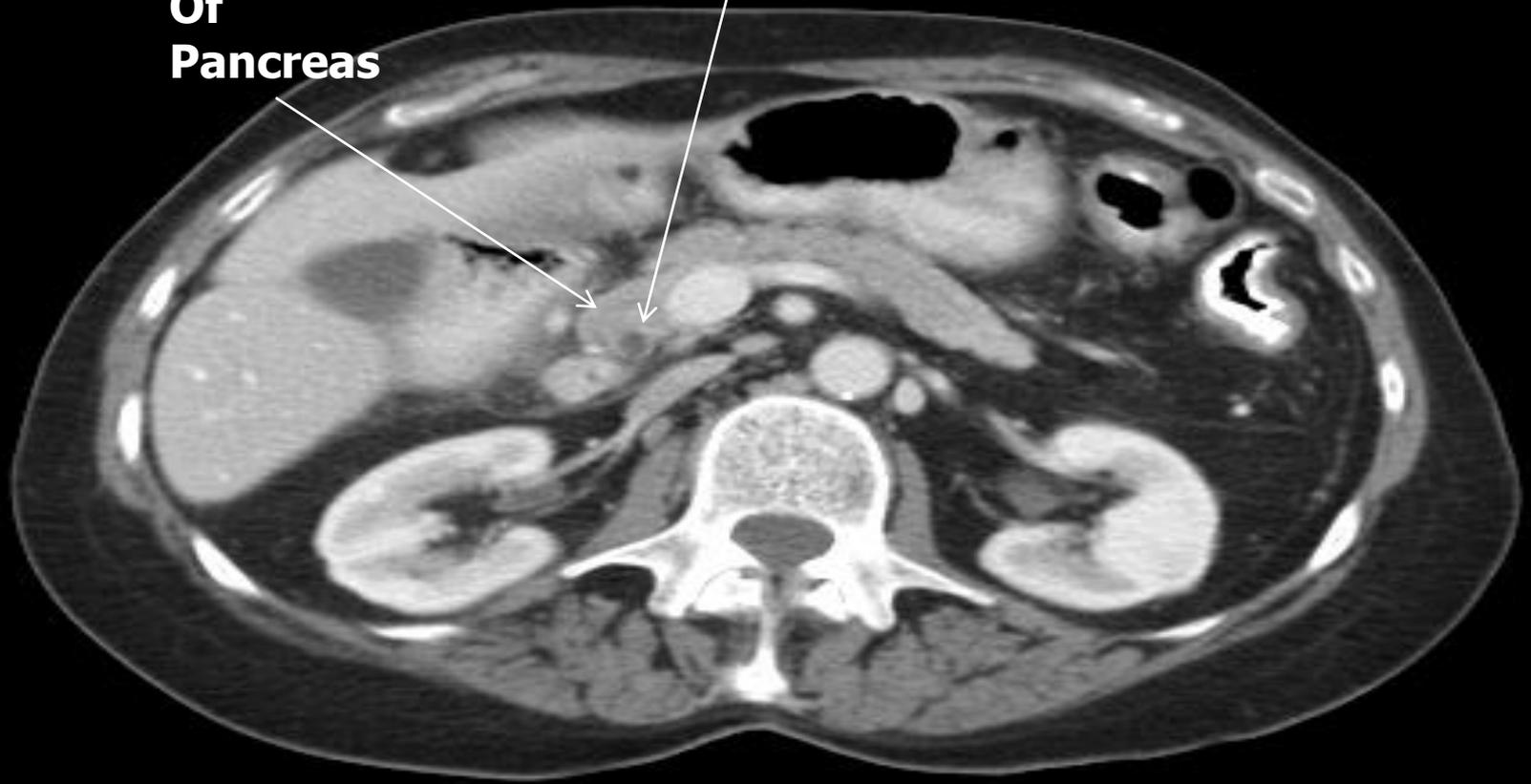
Pancreas

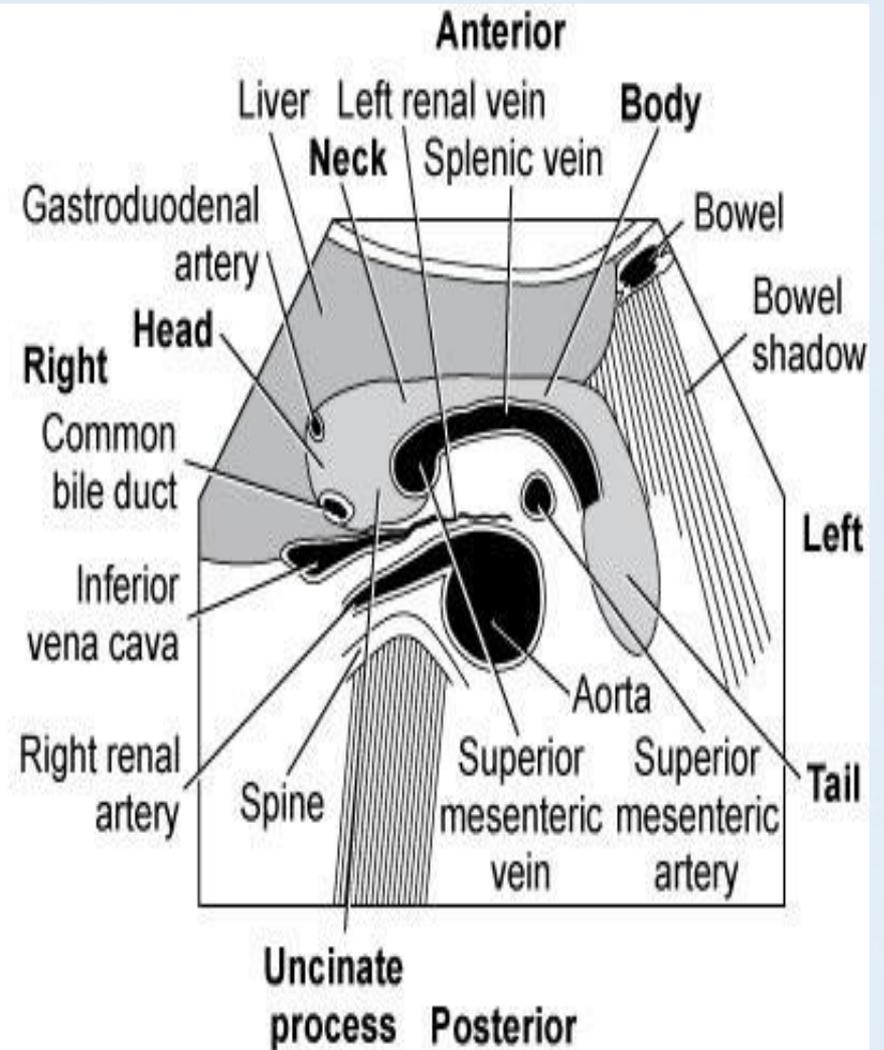
GB



**Head
Of
Pancreas**

Distal CBD





From Curry RA, Tempkin BB: *Sonography. Introduction to Normal Structure and Function, 2nd edition, 2004, WB Saunders.*

Unn. Fig. 8-2.