Liver diagnostics

- Always biopsy for improved diagnosis...
  - Nodular hyperplasia...
- Biopsy – best quality/certainty of diagnosis
- Open abdomen, or minimal invasive surgery...
- TruCut – less invasive
- Fine Needle Aspirate – “the bricks of the building, but no structure”

Liver diagnostics

- Biopsy easy to cut at edge

Alternatively: crush the edges with forceps
TruCut
Guided with ultrasound

TruCut
sheathed needle

TruCut
- free needle
Liver surgery – open abdomen

• If difficult to access the liver: make sure you open more cranially

Portosystemic shunts

• The goal of surgery is to identify and occlude or attenuate the abnormal vessel.
• Ameroid constrictors (Fig. 21-12) or cellophane bands are now commonly used in animals with extrahepatic shunts to slowly occlude the shunt vessel.

Chapter 22: Extrahepatic biliary system

• Cholecystectomy is removal of the gallbladder. Fig 22-4.

Ch 22: Extrahepatic biliary system

• A gallbladder mucocele is a mucus-filled dilation or distention of the gallbladder that is associated with dysfunction of mucus-secreting cells within the gallbladder mucosa.
• The gallbladder contents are so thick that they cannot be excreted out the bile duct.
• Treatment: Cholecystectomy
• Page 628
Ch 22: Extrahepatic biliary system

- Calculi found in the gallbladder are **choleliths**; (those found in the common bile duct are **choledocholiths**). Calculi are often called **gallstones**. P 626
- Treatment: Cholecystectomy
- Humans?

Ch 24: Surgery of the spleen
(Surgery of the Hemolymphatic System)

- **Splenectomy** is surgical removal of the spleen.
  - Common!

Splenectomy
(Surgery of the Hemolymphatic System)

• Splenectomy is surgical removal of the spleen.
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Spleen

- Hemangiosarcoma is the most common primary tumor of the spleen in dogs.

Textbook: 2/3 of all tumors are malignant, and 2/3 of those are HSA. 1/3 is benign
Japan: ½ / ½ malignant/benign.
Of the malignant, 2/3 are HSA

Hemangiosarcoma (HSA):

- Overview
  HSA is a common tumor of the spleen usually seen in older dogs (8-10 years of age). Any large breed dog appears to be at an increased risk especially German Shepherds, Golden Retrievers, Labradors and Poodles.

www.acvs.org/AnimalOwners/HealthConditions/SmallAnimalTopics/SplenicMassesinDogs
**Splenic Torsion:**

**Overview**

This occurs when the spleen rotates/twists thus preventing blood drainage and subsequent enlargement of the spleen. It occurs in large and giant breed dogs (e.g., Great Danes, German Shepherds) with deep chested conformation. It may occur on its own (rare) or in combination with GDV (gastric dilatation-volvulus). Rolling, retching and exercise may increase the spleen’s ability to move along with stretching of the ligaments that normally stabilize the spleen, resulting in twisting of the spleen.

**Hematoma and Nodular Hyperplasia:**

These are the most common non-neoplastic lesions found in the spleen and account for 20-41% of all splenic lesions. They are benign nodules/masses of clotted blood. Surgical removal is curative.

**Sarcoma**

- Survival time?  
  - Ca 3 months