

KEY LEARNING POINTS

NECROSIS, REGENERATION AND REPAIR OF THE LIVER

METABOLISM

The materials provided (lecture notes, annotated lecture images and practical Question and Answer sheets) should allow you to answer the following questions.

- What are some causes of **focal hepatic necrosis**?
- What are common causes of **multifocal hepatic necrosis**?
- What is meant by the term **telangiectasis**? In which domestic animal species is telangiectasis most commonly seen?
- What is meant by the term **zonal necrosis** of the liver? What is the most common type of zonal necrosis and why? What are some causes of this type of zonal necrosis?
- What is meant by the term **massive necrosis** of the liver? What are causes of massive necrosis? What is the most likely cause of acute massive necrosis in a young pig?
- In what circumstances does **hepatic fibrosis** develop? What is the major source of excess collagen in the liver?
- What is the function of **hepatic stellate cells** in health? Where are they located?
- Why are stellate cells so important in progressive hepatic disease?
- What is meant by the terms **portal (or biliary) fibrosis**, **centrilobular fibrosis**, **bridging fibrosis**, **post-necrotic scarring** and **diffuse hepatic fibrosis**? Which of these patterns of fibrosis are most likely to lead to progressive liver disease and why?
- Which cell populations can divide to replace hepatocytes killed by disease processes?
- What must be retained in order to ensure efficient hepatic regeneration post-injury?
- What is characteristic of the pattern of regenerative hyperplasia of hepatocytes?
- What is meant by the term **cirrhosis**? What gross features are indicative of cirrhosis? What are the potential consequences of cirrhosis?
- What causes **acquired portosystemic shunting**?
- How would you distinguish congenital and acquired portosystemic shunting?
- What would you expect to see at laparotomy in a dog with acquired portosystemic shunting?

- What clinical signs would you expect to see in an animal with acquired portosystemic shunting?

VETERINARY BIOSCIENCE: METABOLISM
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