



Diagnostic studies of liver in animals

P Sarah*

Department of Animal Production, University of Nevada, Las Vegas, Nevada, USA

*Corresponding author. E-mail: sarah.p@nevada.edu

Received: 02-Aug-2022, Manuscript No. GJAEB-22-74086; **Editor assigned:** 04-Aug-2022-PreQC No. GJAEB-22-74086 (PQ); **Reviewed:** 19-Aug-2022, QC No. GJAEB-22-74086; **Revised:** 26-Aug-2022, Manuscript No. GJAEB-22-74086 (R); **Published:** 05-Sept-2022, DOI: 10.15651/ GJAEB.22.10.007.

DESCRIPTION

Liver being the largest parenchymal organ, as well as the largest gland in body is one of the most vital organs in body metabolism. It is structurally and functionally heterogeneous and has been considered second only to brain in its complexity. It is very complex and hardworking structure and has been considered as the metabolic. These facts are sufficient to indicate its importance in body. Liver is made up of hepatocytes, bile ducts, blood vessels and sinusoidal cells. It is a highly vascularized structure with unique blood flow due to dual supply from the portal vein and the hepatic artery. Liver carries out diverse biochemical processes essential to maintain the homeostasis that include excretion, secretion. Phagocytosis, detoxification, conjugation, esterification, metabolism of carbohydrates, lipids, proteins, vitamins, hormones, drugs and haemoglobin. Liver is also the largest lymph producer in the body. That means liver is involved with almost all of the biochemical pathways that allow growth, fight diseases, supply nutrients, provide energy and aid reproduction. Liver cells go through thousands of complex biochemical reactions every second in order to perform these functions. Since liver deals with so many substances either to get rid of them or convert or use them, it is susceptible to damage from many and varied sources. Primary hepatitis in the dog has been reported to be caused by microorganisms, toxins, drugs, and immune-mediated and breed related metabolic errors.

Different types of liver disorders in animals include hepatitis, cirrhosis, liver tumours, liver abscess and metabolic diseases, just to name a few. Diseased state of liver is also denoted by the term hepatic insufficiency

meaning the lack of ability of liver to carry out its vast and varied functions up to the desired level, owing to either altered activity of hepatocytes or drastic decrease in their number. Hepatic dysfunction means defects in liver function identifiable by biochemical findings whether or not this dysfunction lead to clinical signs, whereas liver failure implies a clinical syndrome, i.e. clinical signs related to liver dysfunction. Laboratory evidence of dysfunction due to a loss of greater than 70%-75% of the liver's functional mass. Hepatic dysfunction may manifest as an acute or chronic subclinical cellular disturbance but can progress to life threatening hepatic failure with multiple organ system compromise. Hepatic disease are usual in large animals. Another phenomena i.e. reactive hepatitis is being investigated and recognized as important part of investigations these days. It is defined as the response of the liver to different extrahepatic processes.

CONCLUSION

Reactive hepatitis in dogs was associated with inflammatory and non-inflammatory diseases of the urinary tract, the reproductive system, the gastrointestinal tract, the cardio-respiratory and the endocrine systems. Such properties of liver though are unique amongst all body organs, complicate clinical recognition of serious liver diseases and pose a challenge to the clinicians to evaluate hepatic dysfunction before a significant portion of the liver is affected. Moreover, not only the clinical signs can be absent for a long time until the disease has progressed to a severe stage, but they also correlate poorly with the real severity of the disease and are often vague.