

THERAPEUTIC MANAGEMENT OF CHRONIC HEPATITIS IN BELGIUM SHEPHERD

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A 2- year- old Belgium shepherd was presented to the Veterinary Clinical Complex, Nagpur with a history of chronic vomiting, lethargy, anorexia and extreme depression. Clinical examination revealed a rectal temperature of 106 F, pulse rate 100/min, congested mucous membrane and abdominal pain. On palpation, there was mild hepatomegaly with splenomegaly. Hematobiochemical parameters were assessed, and there was hyperchromasia with severe thrombocytopenia, severe neutrophilia and increased SGPT. The haematobiochemical report and clinical symptoms diagnosed the case as Chronic Hepatitis. Accordingly, the Dog was treated with Amoxicillin & clavulanic acid and was advised to give syrup Silymarin and Tab Same. The Dog showed a remarkable recovery after the treatment.

Keywords: Chronic Hepatitis, Hepatomegaly, Hypoalbuminaemia.

Chronic Hepatitis is most commonly seen in Dogs and can be diagnosed with haematobiochemical parameters, which are most probably used in referral veterinary clinics. Chronic Hepatitis is characterized by hepatocellular apoptosis or necrosis, a variable mononuclear or mixed inflammatory infiltrate, regeneration and fibrosis Van den Ingh *et al.* 2006. The disease is seen more commonly in middle-aged and older animals, and a gender predisposition has been observed in several breeds. In chronic Hepatitis, the inflammation most commonly originates (or usually is more severe) in portal regions, often spilling over into the hepatic lobule (interface hepatitis). A variant of chronic Hepatitis called lobular dissecting Hepatitis is characterized by lobular inflammation accompanied by disruption of hepatic cords by fine fibrous septa, hepatocyte necrosis, and a marked ductular reaction. According to (Bunch, 1993), the etiological factors of Causes of canine Chronic Hepatitis include viruses, bacteria, several toxins and drugs. Several breeds of dogs are predisposed to the development of Chronic Hepatitis, including the American and English Cocker spaniel, West Highland white terrier, Scottish terrier, Labrador retriever and Dobermann (Andersson and Sevelius, 1991). MacPhail *et al.*, 1998 reported NSAIDs as a potential

toxic aetiological factor for Chronic Hepatitis in the Dog.

Case history and Observations

A 2- year- old Belgium shepherd was presented to the Veterinary Clinical Complex, Nagpur with a history of anorexia, chronic vomiting, lethargy and extreme depression. On clinical examination, the Dog revealed a rectal temperature of 106F, pulse rate 100/min, congested mucous membrane and abdominal pain. Detailed anamnesis revealed that the Dog was also treated with NSAID medication (acetaminophen) for a week. Abdominal palpation revealed mild hepatomegaly with mild splenomegaly.

Haematological Parameters were assessed and depicted below:

According to the haemato-biochemical parameters, severe neutrophilia with thrombocytopenia was observed, and SGPT and SGOT were highly increased with alkaline phosphatase and gamma-glutamyl transferase. Blood urea nitrogen and creatinine were also increased. Albumin and globulin were in the normal range. According to the anamnesis, haematobiochemical parameters and clinical examination, the case was diagnosed as chronic Hepatitis. For Further examination, ultrasonography was advised, and it revealed mild hepatomegaly

and splenomegaly, Blood vessels in the liver were engorged. A detailed examination and electrocardiography were performed and showed no abnormality. The Faecal sample

was also assessed for the parasitic eggs but found negative. A Liver biopsy could not be attempted because of the low platelet count and the resultant bleeding.

Haematological Parameters:

Parameter	25/04/22	30/04/22	06/05/22	17/05/22	30/05/22
Hb(gm/dl)	18.3	15.1	13.7	13.4	15.6
TLC(10^3)	9.8	6.5	12.7	8.4	10.8
Neutrophil(%)	91	81.9	73.8	77.1	79.9
Platelet count(10^3 /mm ³)	61	147	203	311	293

Biochemical Parameters:

Parameter	25/04/22	30/4/22	06/05/22	17/05/22	30/05/22
ALT/SGPT(IU/L)	4502	1500	423.7	100	59.7
ALP(IU/L)	4059	2520	1270	393	146.6
GGT(IU/L)	177	96.7	25	5.91	3.4
SGOT(IU/L)	950	60	24.4	20.6	20.9
BUN (mg/dl)	17.3	63	60.2	38.4	31.7
Creatinine (mg/dl)	0.9	3.0	2.0	1.98	1.91
Albumin	2.5	2.1	2.6	2.5	2.6
Globulin	3.6	3.5	3.2	3.6	3.5

Treatment

According to the clinical status, the dog was treated symptomatically with antibiotics (Amoxicillin & clavulanic acid@10mg/kg PO) and dextrose 5% intravenously. The dog was advised to give a Hepatic support diet, Syrup (Silymarin) was advised to give 5ml twice a day, Tab. (SAME + Silybin) was given one tab OD for 20 days, and tab Ursodeoxycholic acid@15mg/kg for a week. A Dog showed a remarkable recovery after three weeks.

Results and Discussion

In the present case, Chronic Hepatitis was seen in 2- year- old male Dog. The enzymes AST, ALT, ALP, and GGT were increased in the present case; the same Clinicopathologic findings were consistent

with hepatic disease and included an increase in one or more of the serum enzymes AST, ALT, ALP or GGT. Non-specific indicators of a reduction in hepatic function included hypoalbuminaemia and decreased urea due to decreased protein metabolism. The most common ultrasonographic abnormality was a change in hepatic echotexture to a combination of hypo- and hyperechogenicity, followed by a reduction in hepatic size. The aetiology of Chronic Hepatitis in the majority of cases of canine Chronic Hepatitis is also unknown, although a proportion of cases are due to disorders of copper metabolism as also reported by Poldervaart *et al.*, 2009.

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