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ABSTRACT

The study was conducted on 40 dogs presented at Teaching Veterinary Clinical Complex CSKHPKV, Palampur (H.P.) with the history of seizures between November 2015 and April 2017. On the basis of history and clinical examination, dogs affected with seizures were subjected to haemato-biochemical examinations. The overall incidence for the disease was 2.68% (40/1493) in the clinics. Out of 40 cases, 62.5% were of idiopathic seizure, 25% were of structural (Canine Distemper) and 12.5% were of reactive seizure. Incidence of idiopathic seizure was 1.67% (25/1493). Among idiopathic seizure, 84% cases showed their first symptom at the age between 6 months to 6 years. The mean age at onset of seizure in all cases was 2.26±0.33 years. The disease was more prevalent in males (62.5%) and in Mongrel dogs (22.5%). The prominent clinical signs were generalized tonic-clonic movements (62.5%) and partial seizure symptoms (37.5%) including jaw champing, myoclonous, stiffness of limbs and jaws and circling movements with pre ictal and post ictal symptoms. Other clinical observations included raised body temperature (104.06±1.22° F in poisoning cases), tachypnoea, tachycardia, anorexia, inappetance, oculonasal discharge and dehydration. Haematological examination revealed neutrophilic leukocytosis and lymphopenia in structural seizure (Canine Distemper), hepatic encephalopathy and poisoning cases. The mean activities of aspartate amino transferase and alanine transferase were markedly higher in hepatic encephalopathy and poisoning cases. Biochemical examination revealed increased BUN, creatinine, total and differential bilirubin and hypoproteinemina in hepatic encephalopathy cases. Mineral estimation revealed hypocalcemia in idiopathic, structural and reactive cases with hypomagnesemia in idiopathic and structural cases. Combined therapy comprising Potassium bromide and Levetiracetam along with supportive therapy was found most efficacious (40% cases with partial and 50% cases with complete cessation of seizure with 83.33% survivability rate in idiopathic, 100% each in hepatic encephalopathy and poisoning cases) with least adverse effects and clinical improvement in shortest time.

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