

THERAPEUTIC MANAGEMENT OF HEAD INJURY DUE TO AUTOMOBILE ACCIDENT IN A PUP

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A two months old non-descriptive pup of body weight 3.8kg was presented to Teaching Veterinary Clinical Complex, College of Veterinary Science and A.H, DSVCKV, Anjora, Durg with the history of automobile accident on the same day. On physical examination pup appeared to be in shock with subnormal temperature of 97.5°F, head injury, stiff neck, dilated pupils, recumbent and no external injuries except small abrasions on head. The pup was clinically diagnosed as a case of traumatic head injury and shock. The pup was treated immediately for shock and trauma and the treatment followed for next five days. The pup showed remarkable improvement and eventually it started walking. All neurological signs disappeared slowly and the neck stiffness also reduced in next three days of treatment.

Keywords: Accident, Recumbent, Shock, Sub normal temperature, Trauma.

A head injury refers to an obvious external wound to the head including the face, caldarium, and scalp, such as cerebral contusion, concussion, laceration, abrasion, epidural hematoma, subdural hematoma, and fracture (Bruns and Hauser, 2003; Bruns and Jagoda, 2009). It may or may not be related to traumatic brain injury (TBI). Traumatic Brain Injury is further defined as a damage done to the brain by external force, such as blunt or penetrating force, in contrast to a head injury. It can cause brain dysfunction including effects on physical, behavioral, or cognitive functions. In present case, we observed pain and with small abrasive wound which helped us to confirm that dog was suffering from head injury.

A damaged forebrain and cerebral cortex in a dog can cause seizure, drooping heads, altered character, contra lateral blindness, contra lateral ataxia, contra lateral deficit of proprioception, contra lateral facial paralysis, and pneumocephalus (Haley and Abramson, 2009). Generally speaking, acute neuro-inflammatory responses and other subsequent damages develop within 72 hours according to an animal model report (Williams *et al.*, 2007; Sulejczak *et al.*, 2008).

Case History and Observations

A 2 month old non descriptive pup of body weight 3.8kg was brought to Teaching Veterinary Clinical Complex, College of veterinary science and A.H, DSVCKV, Anjora, Durg, with the history of automobile accident on the same day in morning. On clinical examination, pup appeared to be in shock with subnormal temperature of 97.5° F, head injury, stiff neck, dilated pupils, recumbent and unable to walk. Physical examination also indicated that it had no other external open wounds all over the body (Fig. 1). Though pedal reflex were present but the papillary reflex were slightly low in the right eyes and the palpebral reflex remained normal. The pup was clinically diagnosed with head trauma causing shock.

Treatment

Animal was treated with Inj. Meloxicam @ 0.2 mg/ kg b.wt. IM, Inj. Dexamethasone @ 0.5 mg/kg b.wt. IV and Inj. Multivitamins (Containing a combination of Thiamine hydrochloride-50mg., Pyrodoxine hydrochloride-50mg. and Methylcobalamine -500mg. /ml) 0.5ml IM, Inj. DNS also; and the same line of treatment was followed for next 5 days. The pup

showed immiscible improvement and eventually the pup started walking and eating. All neurological signs gradually disappeared

and the neck stiffness also subsided in 3 days of treatment.



Fig. 1. Before treatment

Results and Discussion

After five days treatment and proper care the pup survived and recovered from the traumatic head injury. Increase in intracranial pressure is most severe complication of traumatic brain injury and the condition further becomes worst due to cerebral ischemia and secondary brain injury:-

Conclusions

Ultimately, the successful management of traumatic head injury and shock required

constant and accurate monitoring and frequent assessment of the patient's clinical and neurological status. It is important to remember that prompt and proper line of treatment in many dogs with severe traumatic head injury can improve and survive to have a good quality of life.

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