Computed Tomographic Evaluation and Management of Three Canine Patients with Head Trauma

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Introduction: This report describes use of a conventional computed tomography to diagnose with head trauma in three dogs.

Materials and methods: According to physical and neurologic examination, survey radiographyand computed tomography, these patients were diagnosed as traumatic brain injury. Pre-contrast computed tomography (CT) were used to image the head. Then, Post-contrast CT was performed using the same technique. The Modified Glasgow Coma Scale (MGCS) score was used to predict their probability of survival after head trauma in these dogs

Results: Computed tomogram showed fluid filled tympanic bulla, fracture of left temporal bone and cerebral parenchymal hemorrhage with post contrast ring enhancement. However, In one case, computed tomographic examination didn't delineate cerebellar parenchymal hemorrhage, which was found at postmortem examination. Treatments for patients placed in intensive care were focused to maintain cerebral perfusion pressure and to normalize intracranial pressure.

Clinical relevance: In these case, diagnostic computed tomography was a useful procedure. It revealed accurate location of the hemorrhage lesion. The MGCS score could be predicted the probability of survival in head trauma but not a patient with skull fracture.

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