

Potential Seizurogenic Effect of Tramadol in a Jindo Dog with Necrotizing Meningoencephalitis

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Signalment: A Jindo dog (8-months-old, intact male) was referred for hind limb lameness on right side. The dog was diagnosed a simple femoral fracture by radiological examination.

Results: After surgical fixation of the femoral fracture, tramadol, a narcotic-like synthetic analgesic, was administrated intravenously for post-operative analgesia. Seizure was immediately occurred after that. About seventeen hours later, the dog died despite of intensive care. We suspected that tramadol might induce the seizure or promote severe cause resulted in death. An autopsy was performed to figure out the cause of the death. In consequence, the dog was diagnosed as necrotizing meningoencephalitis(NME) based on histopathological analysis.

Clinical relevance: NME is mainly happened in small breed dogs, such as pugs, Malteses or Yorkshire terriers, and rare in large breeds. However, we got a NME case in the Korean Jindo dog, one of medium breeds. Moreover, we would be concerned that tramadol may be related to seizure activity in the NME patient. From our case, it is know that although tramadol has been proven to be a safe and effective agent for the control of pain, it would be carefully used toward neurological patients.

Key words: necrotizing meningoencephalitis, tramadol, seizure, dog

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