





Case Report

Case Report of Fibrocartilaginous Embolic Myelopathy of the Spinal Cord in a Female Dog

Sina Salavati¹ , Muhammad H Kafrashi², Daryoush Babazadeh^{3,*} , and Mohammadreza Raznahan²

¹ Department of Small Animal Medicine, Faculty of Veterinary Medicine, Shiraz University, Shiraz, Iran

² Faculty of Veterinary Medicine, Ferdowsi University of Mashhad, Mashhad, Iran

³ Pet and Exotic Diseases Clinic, Aria Veterinary Hospital, Mashhad, Iran

* **Corresponding author:** Daryoush Babazadeh, School of Veterinary Medicine, Shiraz University, Shiraz, Iran. Email: daryoush.babazadeh@shirazu.ac.ir

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ABSTRACT

Introduction: Fibrocartilaginous embolic Myelopathy is a non-progressive injury in the spinal cord that can cause infarction in the veins of spinal parenchyma, leading to ischemia and necrosis.

Case report: Fibrocartilaginous embolic Myelopathy was diagnosed in a 4-year-old female Spitz dog using the clinical neurological examination. The dog was hospitalized, and the treatment, including supportive treatment and Cortone, was set up for 3 weeks. Then, Diazepam and Methocarbamol were added to the prescription, and treatment continued for 2 weeks. A general improvement was noted after 3 weeks, and the dog could stand perfectly after 5 weeks.

Conclusion: Three weeks of supportive treatment, Cortone therapy as well as the addition of Diazepam and Methocarbamol to the treatment could help the dog stand on its feet. However, it cannot be ignored that knowing about the history of the dog played an important role in its treatment procedure.

1. Introduction

Fibrocartilaginous embolic Myelopathy is an acute and non-progressive injury in the spinal cord, such as fibrous and cartilage, causing infarction in arteries and veins of spinal parenchyma followed by ischemia and necrosis¹. Pain is initially present at the onset of the disease; however, when the dog has no signs of pain during the clinical examination, the disease can be differentiated from conditions, such as disc hernia type 1, spinal fractions, and luxation of the vertebra². Subsequently, the patient experiences a sudden onset of paraparesis³.

2. Case Report

In October 2020, a 4-year-old sterilized female spitz was referred to the Aria Veterinary Hospital, Mashhad, Iran. The owner claimed that the dog suddenly lost the ability to walk on her back legs the night before without any history of trauma. During the clinical and physical examination, the dog was quite alert, indicating paraparesis, perineal hyperreflexia, colonic patellar

reflex, negative panniculus reflex, normal hopping and knuckling reflex in hands, hypertonia, and stiff muscle in hands on the lateral position as well as mild hypotonia and no deep pain in legs. The hematological reference ranges and the radiographs were also normal (Figure 1, radiographs were not archived).

According to the clinical neurological examination and the history, the animal was suspected to have Fibrocartilaginous Embolic Myelopathy (FCE) from T3 to L3 (Figure 2). The dog was hospitalized, and the treatment, including supportive treatment (fluid therapy for 5-6% dehydration, 10 ml of Duphalyte q12h) and Cortone (prednisolone at the dose of 1.1 mg/kg, taper off) was set up for 2 weeks. Then, the owner of the dog decided to change the veterinarian, and the second veterinarian added Diazepam and Methocarbamol to its prescription for a week. A general improvement was noted after 3 weeks, and the dog tried to stand on its feet. After 5 weeks, the dog could stand perfectly (Figure 3).

lesions of FCE.

4. Conclusion

Fibrocartilaginous embolic Myelopathy is an acute condition in patients where a thorough patient history can be highly beneficial for diagnosis. The disease is usually self-limited, and general supportive measures, nursing care, and corticosteroids are often effective in its management. However, the specific impact of drugs like Diazepam and Methocarbamol on patients with this condition requires further investigation to establish their roles in treatment.

Declarations

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Competing interests

Authors declare no conflicts of interest.

Authors' contribution

Sina Salavati, Muhammad H Kafrashi, and

Mohammadreza Raznahan diagnosed the case and conducted the treatment. Daryoush Babazadeh supervised the whole procedure.

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