

## Management of Idiopathic Vestibular Syndrome in a Non-descript Dog

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### Introduction

Idiopathic vestibular syndrome is characterized by an acute onset of vestibular signs with no underlying cause. This syndrome is common in both dogs and cats clinically characterized by head tilt, horizontal nystagmus, falling, rolling or circling to affected side. Others sign includes decreased appetite, positional strabismus on affected side and occasional vomiting. The syndrome is common in older dogs of all breeds and any adult cat can be mostly affected. (Shell,1990). The present case reported is a case of idiopathic vestibular syndrome in a non-descript dog and its therapeutic management.

### Case history and Clinical observations

A 16 years old nondescript male dog (Reg no.8625) was admitted to Bai Sakrabai Dinshaw Petits Animal Hospital, Parel, Mumbai with the complaint of tilting of neck on left side, occasional vomiting, unable to get up, stand and improper gait. Clinical examination of dog revealed head tilting on left side, horizontal nystagmus, circling around the body followed by fall down, palor mucus membrane, moderate dehydration (++).

### Diagnosis

The dog was further subjected for Otoscopic and hemato-biochemical examination. Otoscopic examination of both the ears revealed that dog was not suffering from otitis media..

Hemato-biochemical examination such as complete blood count, liver function test, kidney function test revealed all values in normal physiological limit except low hemoglobin and RBC count Looking towards age of dogs (16 years) and clinical signs exhibited by the dog, the case was tentatively diagnosed as idiopathic vestibular syndrome.

### Therapeutic management

The dog was treated symptomatically. The dog exhibited moderate dehydration hence treated with intravenous fluids @ 50ml/kg b.wt such as inj. DNS(500ml) along with inj. Ringer's lactate 300 ml intravenously. For hypoglycemia and generalized weakness the dog was given inj. 25% dextrose (hypertonic solution) after fluid therapy. The dog was also treated with inj Prednisolone 15mg i/m as a antinflammatory as well as pain killer. Inj B1,B2,B6 preparation was also given @1ml intramuscularly as nerve stimulant. Inj Essential amino acids was also administered @ 25 ml intravenously as protein supplementation. Inj Iron dextran was administered @ 0.4 ml intravenously for improvement in hemoglobin given on alternate days. Therapeutic regiment was continued for a week.

The recovery of the case was judged on the basis of normal position of the head, reduction of head tilt and disappearance of nystagmus. There was marked improvement observed after two weeks of treatment, the dog was able to balance the body with normal position of head, nystagmus disappeared and animal is able to walk normally. (Fig 2 )

The dog was further discharged from the hospital and continued with oral medication of Tablet Methylcobalamine 20mg orally for one month. Regular monitoring and follow up of the case done every week. Complete improvement observed after four weeks of treatment.

### Discussion

Vestibular system is responsible for maintaining balance and preventing animal from falling over, holding and adapting position of head and body

(Garosi, 2007). Canine idiopathic vestibular syndrome is also known as geriatric vestibular syndrome. Older dogs (Mean age 12.5 years) are primarily affected characterized by sudden onset of ataxia, head tilt, nystagmus and occasionally vomiting with unknown cause (Thomas, 2000). The present case also exhibited similar symptoms as discussed.

Shell (1990) discussed diagnostic the diagnostic plan in a patient that does not have historical or physical examination findings consistent with trauma, systemic illness or ear disease. However the diagnosis should be supported by clinical improvement of signs within several weeks. In the present case since there is no underlying cause found hence the diagnosis was done on the basis of clinical improvement.

Allen *et al* (1991) found that the old dogs suffering from idiopathic vestibular disease recover after use of nonspecific and supportive treatment In the present case the dog was treated with antiinflammatory, nerve

stimulants and supportive treatment such as fluid therapy, protein supplementation, iron supplementation as well as hypertonic glucose preparation. Complete improvement in the form of disappearance of clinical symptoms was observed four weeks after treatment. The dog was further advised to administer Tab. Methylcobalamine orally as it would stimulate nerve regeneration and prevent demyelination. The dog was successfully recovered and became active.

#### References

1. Allen, D.G (1991): Small Animal Medicine. J.B. Lippincott Company, Philadelphia pp 753-759.
2. Garosi L.S (2007): Vestibular disease in dog & cats. In practice, *J. Am. Vet. Med. Asso.* 29, 151-157.
3. Shell L (1990): The Cranial nerves of the brain stem. *Prog-Vet Neurol*, 1:233-245
4. Thomas W.B (2000): Pathophysiology, diagnosis and management of common vestibular disorders in dogs and cats. *Vet. Clin. North. Am. Small. Anim Pract.* 30 (1):227-249.

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