

VESTIBULAR DISEASE IN SENIOR DOGS

BASICS

OVERVIEW

- Sudden (acute) nonprogressive disturbance of the peripheral vestibular system in senior dogs
- The vestibular system controls the animal's sense of equilibrium, balance, and orientation; it is composed of the inner ear, nerves, and brain

SIGNALMENT/DESCRIPTION of ANIMAL

Species

- Dogs

Breed Predispositions

- None reported
- Seems to occur more frequently in medium-to-large breeds

Mean Age and Range

- Senior dogs; pets usually greater than 8 years of age

SIGNS/OBSERVED CHANGES in the ANIMAL

- Sudden onset of imbalance, disorientation, reluctance to stand, and (usually) head tilt and irregular eye movements (known as “nystagmus”)
- May be preceded or accompanied by nausea and vomiting
- Head tilt—mild to marked; occasionally erratic side-to-side head movements
- Mild to marked disorientation and wobbly, incoordinated or “drunken” appearing gait or movement (known as “ataxia”) with tendency to lean or fall in the direction of the head tilt
- Strength is normal
- May have base-wide stance

CAUSES

- Unknown

TREATMENT

HEALTH CARE

- Usually outpatient
- Severe disease—patients that cannot walk (known as being “nonambulatory”) or require intravenous fluid support should be hospitalized during the initial stages
- Treatment is supportive, including rehydration and/or maintenance intravenous fluids, if necessary
- Keep recumbent patients warm and dry using soft, absorbent bedding
- Severe disease—physical therapy, including passive manipulation of limbs and moving body to alternate sides, may be required initially

ACTIVITY

- Restrict activity as required by the degree of disorientation and wobbly, incoordinated or “drunken” appearing gait or movement (ataxia)

DIET

- Usually no modification required
- Nausea, vomiting, and severe disorientation—initially withhold food intake by mouth

MEDICATIONS

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive.

- Sedatives—for severe disorientation and wobbly, incoordinated or “drunken” appearing gait or movement (ataxia), such as diazepam
- Medications to control nausea and vomiting (known as “antiemetic drugs”) or drugs against motion sickness—questionable benefit; medications include dimenhydrinate and meclizine
- Steroids—not recommended, especially in senior patients that may have low fluid intake; steroids do not alter the course of the disease

- Antibiotics—advised when infection/inflammation of the middle ear (known as “otitis media”) and inner ear (known as “otitis interna”) cannot be ruled out; examples are trimethoprim-sulfa, first-generation cephalosporin (such as cephalexin), and amoxicillin/clavulanic acid

FOLLOW-UP CARE

PATIENT MONITORING

- Nervous system examination—repeat in 2 to 3 days, to confirm stabilization and initial improvement
- Discharge inpatient when able to walk (known as being “ambulatory”), eat and drink

POSSIBLE COMPLICATIONS

- Fluid and electrolyte imbalances and inability to offset kidney insufficiency (if pet has decreased kidney function)—may follow vomiting and/or insufficient fluid and food intake

EXPECTED COURSE AND PROGNOSIS

- Improvement of clinical signs usually starts within 72 hours, with resolution of vomiting and improvement of irregular eye movements (nystagmus) and wobbly, incoordinated or “drunken” appearing gait or movement (ataxia)
- Head tilt and wobbly, incoordinated or “drunken” appearing gait or movement (ataxia)—significant improvement usually occurs over 7 to 10 days; if no improvement in this time, other causes of vestibular disease should be evaluated
- Mild head tilt may remain
- Most patients return to normal within 2 to 3 weeks
- Recurrence—rare; brief return of signs may occur with stress (such as following anesthesia); repeat episodes of vestibular disease in dogs can occur on the same or opposite side, but are uncommon

KEY POINTS

- Although the initial signs can be alarming and incapacitating, the prognosis for rapid improvement and recovery is excellent

