

Vestibular Disease in Senior Dogs

Basics

OVERVIEW

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

SIGNALMENT/DESCRIPTION OF PET

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 PET

- Sudden onset of imbalance, disorientation, reluctance to stand, and (usually) head tilt and irregular swinging eye movements (known as “nystagmus”); lesions may affect one or both sides
- May be preceded or accompanied by nausea and vomiting
- Head tilt—mild to marked; tilted to the side of the lesion; 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
- Swinging eyeballs (known as “resting nystagmus”) may be present in the early phases—side to side or rotary, more pronounced if lesion is one-sided
- Strength is normal
- May be reluctant to stand
- May have base-wide stance if lesion affects both sides of the brain

CAUSES

- Unknown

Treatment

HEALTH CARE

- Mild vestibular disease—usually can manage as an outpatient
- Severe disease—pets that cannot walk (known as being “non-ambulatory”) or require intravenous fluid support



should be hospitalized during the initial stages

- Treatment is supportive; nursing care done to keep recumbent pets warm and dry using soft, absorbent bedding; sometimes urinary catheters are placed if the pet is unable to urinate on its own
- 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 compromised gait or movement (ataxia)

DIET

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

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, acepromazine
- Medications to control nausea and vomiting (known as “antiemetic drugs”) or drugs against motion sickness—questionable benefit; medications include dimenhydrinate and meclizine
- 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 for outpatient—repeat in 2–3 days, to confirm stabilization and initial improvement
- Discharge inpatient when able to walk (known as being “ambulatory”), and has resumed eating and drinking

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
- Pressure “bed” sores, without nursing care

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 7–10 days; if no improvement in this time, other causes of vestibular disease will be evaluated
- Mild head tilt may remain
- Most pets return to normal within 2–3 weeks
- Recurrence—repeat episodes of senior vestibular disease in dogs can occur on the same or opposite side, but are uncommon; brief return of signs may occur with stress (such as following anesthesia)

Key Points

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