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Vestibular Disease

Vestibular disease is a two-headed monster. It can manifest in a benign form – peripheral – or a more serious form – central . What makes this disease devious is that both forms share similar signs, such as sudden loss of balance and head tilt. A correct diagnosis is essential as soon as possible because vestibular disease may be deadly

Eric Glass, DVM a veterinary neurologist with the Red Bank Veterinary Hospital in New Jersey, explains, “The vestibular system is responsible for balance. This system starts in the inner ear receptors and follows a nerve that travels through the skull into the brain. The peripheral form of t the disease affects the receptors and nerve while the central form affects the brain.”

According to Glass, “Vestibular disease is often confused with a stroke or poisoning. Typical signs can vary, depending on the underlying problem. In order to distinguish the diagnosis as peripheral or central, your veterinarian needs to do a good neurological exam.”

Most vestibular signs have a rapid onset: they may appear in hours or even minutes – and without warning signs. Fortunately, prognosis is good for the majority of peripheral vestibular cases where signs may last from a few days to a few weeks. For dogs affected by central vestibular disease, however, the prognosis depends on the cause or if there is a treatment available.

While the two varieties of the disease share one common adjective – vestibular – they generally have separate symptoms, causes, and treatments.

Disease	Hallmark signs	Causes	Diagnosis Options	Treatment Options
Peripheral vestibular disease	<ol style="list-style-type: none"> 1. Head tilt 2. Loss of balance 3. Abnormal eye movements known as nystagmus in which they eyes, in the fast phase, move in the opposite direction from the head tilt. 4. Sympathetic nerve disturbances such as changes in pupil size, visible third eyelid, and other ocular changes. 5. Facial nerve dysfunction, such as inability to blink 6. Vomiting, nausea 	<ol style="list-style-type: none"> 1. Old age – the variant often known as “geriatric/ old dog syndrome.” It occurs in dogs over 10 years old and is idiopathic, meaning it has no known cause. The dog will usually recover over time, but sometimes the head tilt persists. In rare cases, it may recur. This is the most common form of peripheral vestibular disease. 2. Inner ear infection – common in certain 	<ol style="list-style-type: none"> 1. Ear exam 2. Routine blood work 3. Thyroid “panel” (a series of thyroid function tests) 4. Radiograph (x-ray) of the skull 	<ol style="list-style-type: none"> 1. Do nothing except keep the dog comfortable. <ol style="list-style-type: none"> a. Do not lift him quickly. b. Hand-feed him water and food that is easily nibbled, as he may be unable to negotiate the fine motor movements that are needed to eat or drink from his bowl. c. Make sure his feet are firmly on the ground to help him keep or regain his balance. d. Put him on fluids if he is too nauseated to eat. 2. Administer appropriate antibiotics if he has an

		breeds such as Cocker spaniels. 3. Hypothyroidism 4. Tumor 5. Antibiotics such as streptomycin and gentomicin		inner ear infection 3. Give thyroid supplement if he has hypothyroid condition. 4. Surgery or radiation may be needed if a tumor is present.
Disease	Hallmark Signs	Causes	Diagnosis Options	Treatment Options
Central vestibular disease	<ol style="list-style-type: none"> 1. Head tilt 2. Loss of balance 3. Disturbance of nerves that supply the head and the face 4. Leg weakness 5. Changes in level of consciousness and personality 6. Vomiting 	<ol style="list-style-type: none"> 1. Tumors 2. Use of the antibiotic metronidazole TM 3. Encephalitis (inflammation of the brain) 4. Stroke (very rare in dogs) 5. Infections 	<p>Consult a veterinary neurologist who may:</p> <ol style="list-style-type: none"> a. Perform a neurological exam b. Conduct specialized tests such as an MRI or spinal tap c. Provide specialized treatment such as drug therapy, radiation therapy, or brain surgery 	<ol style="list-style-type: none"> 1. Put dog on steroids to decrease inflammation and swelling in the brain. 2. Administer fluids. 3. Dispense steroids. 4. Perform surgery 5. Use radiation therapy 6. Employ chemotherapy 7. Consider euthanasia, depending on the cause and prognosis