



VCSG

Veterinary Care & Specialty Group

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Iodine-131 Therapy

Hyperthyroidism may be the single most commonly diagnosed hormonal disease in cats next to diabetes. It is generally a disease of older cats with an average age around 9-10+ years, but can be seen in cats as young as 5 years of age. In most cases, the disease is caused by a growth of abnormal, non-cancerous cells which secrete thyroid hormones in excess of the normal levels. If left untreated, a hyperthyroid cat can exhibit many, if not all, of the following signs: extreme weight loss; excessive appetite in most cases, but decreased appetite in some; muscle weakness; heart disease (increase in the size of the heart, increased rate, changes in heart rhythm, cardiac arrest); intolerance to stress; and eventually death.

VCSG will be treating patients with hyperthyroidism starting 2021. For more information, email info@vcsgvets.com.

**From all of us at VCSG
Best wishes for a
happy and healthy
2021!
Happy New Year!**

**Journal Club
Wednesday, Feb. 3
8:30 a.m.**

**Dr. Reid Groman
All Are Welcome!**

Details on our website.



Ask the Vet: Christiane Massicotte, DVM, MS, PhD, DACVIM (Neurology)

Electrophysiology for Evaluation of Peripheral Nerve and Muscle Functions

The motor unit consists of the ventral horn cell within the spinal cord, its axon and the muscle it innervates. Electrophysiology is essential to evaluate the pathophysiology triggered by diseases affecting each component of the motor unit.

Possible causes of motor unit disorders:

1. Neuropathy: peripheral nerve dysfunction
2. Myopathy: diffuse skeletal muscle dysfunction
3. Junctionopathies: disorders of neuromuscular transmission
4. Spinal cord: disorder of cervical (C6-T2) or lumbar (L4-S3) intumescences

Electrodiagnostic tests are indicated when any of the following signs are observed:

1. Short strided (choppy) gait
2. Monoparesis with decrease muscle tone
3. Diminished sensory awareness
4. Muscle stiffness and muscle pain
6. Elevated creatine phosphokinase (CPK)
6. Decreased spinal reflexes and poor muscle tone, generalized or focal
7. Laryngeal paralysis
8. Episodic/intermittent weakness
9. Muscle atrophy of selected groups of muscles, face or limbs

In addition, electrodiagnostic tests can evaluate nerve integrity following trauma to a limb, fracture or fracture repair. It is the most sensitive test to differentiate local from more diffuse subclinical myopathies or neuropathies, since at onset, a more generalized problem of the motor unit can be asymptomatic. It is also helpful to differentiate disuse from neurogenic muscle atrophy, providing a more comprehensive understanding of orthopedic and/or neurogenic limb dysfunction.

Electrodiagnostic tests of the motor unit require sophisticated equipment and training. At VCSG, we use a state of the art Cadwell electrodiagnostic machine. Our neurologist performs electromyogram, F-waves, sensory/motor nerve conduction and repetitive nerve stimulation studies on a regular basis.

In summary, EMG and Nerve CV techniques can provide insight into the nature of the lesion.

Distinguish between myopathies Vs neuropathies

- a. Axonopathy – decreased amplitude of CAMP
- b. Demyelination - decreased velocity and abnormal polyphasic waves

If you have any questions regarding these procedures or their benefits in accurately evaluating the function of the nervous system, please contact the neurology department at VCSG.

