

Erratic Movements, Wobbliness, and Twitchy Muscles – What's Going On?

These are just 3 of about 15 weird symptoms that can mean an imbalance that requires long-term TLC. Symptoms also line up with this mineral deficiency. Dogs and cats can be affected. Risk depends on breed and age. Here's what to know, especially if your breed is at high risk.

Reviewed by [Dr. Becker](#)

STORY AT-A-GLANCE

- The parathyroid glands are located on the thyroid glands in your pet's neck
- Pets with hypoparathyroidism are secreting little to no parathyroid hormone from the parathyroid glands, which causes a decrease in the level of calcium and an increase in the level of phosphorus in the bloodstream
- Symptoms of hypoparathyroidism are the result of low blood calcium levels and can include loss of coordination, decrease in heart rate, loss of coordination and involuntary muscle contractions
- A diagnosis of hypoparathyroidism requires diagnostic testing, and in some cases additional tests are required to rule out other disorders with similar symptoms
- Treatment typically requires long-term supplementation of calcium and vitamin D, and species-appropriate nutritional support

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The parathyroid glands are located on the thyroid glands ("para" means adjacent to or alongside). The thyroid and parathyroid glands are positioned at the front of your pet's neck, near the windpipe (trachea), just below the skin.

The job of the parathyroid gland is to secrete a hormone that regulates calcium and phosphorus levels in the blood by adjusting the amounts of those minerals that are absorbed by the gastrointestinal tract, eliminated by the kidneys and released from the bones into the bloodstream. It's a very complex system.

If your pet is suffering from a condition known as hypoparathyroidism, it means there is little to no parathyroid hormone being secreted by the parathyroid glands. This causes a decrease in the level of calcium in the bloodstream and an increase in the level of phosphorus in the bloodstream.

Fortunately, hypoparathyroidism is rare in dogs and even less common in kitties. In cats, it's usually the result of removal of the thyroid gland and inadvertently, the parathyroid glands along with it. In dogs, the condition is often the result of immune-mediated destruction of the parathyroid glands, or trauma to the neck.

Symptoms of Hypoparathyroidism

Dog breeds predisposed to hypoparathyroidism include Toy Poodles, Miniature Schnauzers, German Shepherds, Labrador Retrievers and terrier breeds. Female dogs are more commonly diagnosed than males, and the average age at diagnosis is 5 years.

Cats are typically 12 to 13 years of age at diagnosis, and the disease is most often secondary to the removal of the thyroid gland as treatment for **hyperthyroidism**.

Less common causes in kitties are parathyroiditis, which is inflammation of the parathyroid glands, and atrophy (wasting away) of the glands. The symptoms of hypoparathyroidism are actually symptoms of hypocalcemia, or low calcium levels in the blood, and can include:

- Seizures
- Facial rubbing
- Weakness
- Tense abdomen
- Muscle trembling, twitching, or involuntary contraction of muscles
- Increased urination and increased thirst
- Wobbly, drunken or stiff gait, or loss of coordination
- Growling
- Vomiting
- Lethargy
- Panting
- Lack of appetite
- Fever or low body temperature (hypothermia)
- Cataracts
- Slow heart rate (bradycardia)

Symptoms can wax and wane, especially early in the disease.

Diagnosis

Your veterinarian will perform a physical examination and take a thorough history of your pet's health and symptoms. Diagnostic tests will also be needed, and can include:

- Complete blood count (CBC) and serum chemistry profile, including calcium and phosphorous measurements
- Ionized calcium level, which measures the active form of calcium in the blood
- Electrolyte panel
- Urinalysis
- Parathyroid hormone (PTH) test

If your pet is experiencing seizures, weakness, muscle trembling or twitching, it may be necessary to rule out other potential causes for those symptoms, including heart, metabolic or liver disease, as well as inflammatory diseases, tumors or epilepsy.

Treatment Options

Sometimes pets with hypoparathyroidism must be hospitalized initially for medical management of low calcium levels or other symptoms until the patient's condition can be stabilized.

If your dog or cat has hypocalcemia, he or she will require a long-term treatment for the condition. This will include vitamin D and calcium supplementation. Vitamin D is necessary to assure absorption of calcium from the GI tract, and will be prescribed by your veterinarian at a specific dose.

For pets who are stable, calcium and vitamin D supplements can be given orally at home. The dosages must be adjusted as needed based on the animal's response and symptoms, as well as follow-up blood calcium and phosphorus measurements.

Some pets can be weaned off the calcium supplement as long as the vitamin D therapy is continued as dictated by blood test results. As is the case with most hormone imbalances, lifelong treatment of some kind is usually necessary and regular monitoring will be required.

Cats with hypoparathyroidism secondary to thyroidectomy (removal of the thyroid gland) to treat hyperthyroidism often regain normal parathyroid gland function with a few weeks or months following surgery. Partnering with an integrative veterinarian to provide species-appropriate nutritional support is one of the best things you can do for a dog or cat with hypoparathyroidism.

These pets benefit from consuming minimally processed foods, avoiding unnecessary vaccines and reducing home and environmental chemical exposure.
