



## HYPOCALCEMIA

### ABOUT THE DISEASE

Hypocalcemia is characterized by low calcium levels in the bloodstream. Calcium is stored in bone and used for muscle movement. It is regulated by parathyroid glands located in the neck area.

Causes include decreased intake, dysregulation of the parathyroid gland, or increased excretion of calcium. Common conditions: lactation (milk production for pups or kittens), kidney failure, pancreatitis, toxins such as antifreeze, and parathyroid diseases.

Symptoms involve abnormal muscle movement: weakness, twitching, painful cramping, disorientation, incoordination ("drunken appearance"), and seizures (hypocalcemia tetany). Levels below 4 mg/dL can lead to decompensation and death.

### OBTAINING A DIAGNOSIS

Confirmation of hypocalcemia is done through blood testing. Measuring the patient's total calcium levels is usually sufficient for diagnosis, though ionized calcium is more specific. A thorough history and physical examination will identify underlying causes. Additional diagnostic testing may be recommended.

A send-out test for parathyroid hormone levels (PTH) assesses parathyroid gland function. If PTH is low, this indicates primary hypoparathyroidism, requiring lifelong management.

### TREATMENT

Treatment for hypocalcemia depends on symptom severity. Depending on suspected cause, conduct complete blood panel, urine testing, and toxin screens (antifreeze, others). For significant clinical signs or dangerously low calcium levels, hospitalization is usually needed. Patients receive intravenous calcium with close monitoring until levels normalize.

After acute crisis, diagnostic testing identifies underlying cause. Some processes require lifelong treatment or management. Hypocalcemia from acute issues (lactation, pancreatitis) typically needs no long-term therapy after signs resolve.

### TIPS FOR SUCCESS

- Definitive treatment for hypocalcemia: Eliminate underlying cause via veterinarian-developed plan.
- Long-term management: Monitor bloodwork (ionized calcium specifically), depending on cause.