



NORTHPARK Animal Hospital

HYPOKALEMIA

What is hypokalemia?

Hypokalemia is a term that refers to low blood concentrations of potassium. Potassium is an important electrolyte within the body and is vital for the normal function of muscles and nerves. In some situations, the normal control of body potassium concentration is lost and can result in depletion of potassium, and low blood potassium concentrations.

What are the clinical signs associated with hypokalemia?

Mild to moderate hypokalemia is seen relatively frequently in sick cats, but does not usually cause marked clinical signs. However, if severe hypokalemia develops, this can result in profound clinical signs. The main effect of severe hypokalemia is generalized muscle weakness. Affected cats usually show difficulty in getting up and walking, and may appear almost 'drunk' because of their weakness. A common and characteristic sign of the muscle weakness is also an inability to raise the head into a normal position, so that the head is held down. Hypokalemia can also have a number of other effects including marked depression and lack of appetite.

What causes hypokalemia?

The most common cause of the hypokalemia is chronic kidney failure, a condition common in older cats. A variety of other diseases can also cause or contribute to hypokalemia, but are less common. Hypokalemia is the most common cause of generalized muscle weakness in cats.

How is hypokalemia treated?

The hypokalemia and associated clinical signs may be quickly corrected by potassium supplementation. In severe cases, potassium may be given through an intravenous drip. This rapidly corrects hypokalemia and reverses muscle weakness. In less severe cases, and for long-term maintenance of blood potassium, dietary supplementation is usually necessary. The oral supplement, potassium gluconate, is well tolerated by most cats and is available as a palatable supplement to add to the diet or as tablets. Depending on the cause, it may be necessary to continue supplementing potassium permanently, and intermittent monitoring of response to treatment is usually necessary through analysis of blood samples, to ensure the supplementation is adequate but not excessive.