

Use of Glargine in Two Cats with Diabetes Mellitus

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Signalment: A 14-year-old intact male domestic shorthair cat and a 2-year-old neutered male Siamese were presented with anorexia, vomiting, and cachexia to the Royal Animal Medical Center.

The domestic shorthair was diagnosed diabetes mellitus and the other cat was diabetic ketoacidosis.

The domestic shorthair was treated with NPH for diabetes mellitus during 8 months. However, NPH therapy was insufficient to prevent symptomatic hyperglycemia and the development of ketoacidosis.

Results: Serum fructosamine concentration was 606 $\mu\text{mol/L}$ in domestic shorthair cat and 495 $\mu\text{mol/L}$ in Siamese, respectively. They were treated with regular insulin therapy for DKA and disappeared ketoacidosis within a week. Because NPH therapy was not enough to control the diabetes mellitus in cats for long term, the glargine was selected. They were managed with glargine twice a day. Domestic short hair was controlled for 9 months, the other was 3 months. Their serum fructosamine concentration was managed from 270 to 450 $\mu\text{mol/L}$. Their clinical signs were improved and they became normal body condition score until recently.

Clinical relevance: Glargine is a long-acting insulin analogue that has been associated with high remission rates in diabetic cats. Glargine therapy in feline diabetes mellitus was effective to control blood glucose concentration.

Key words: diabetic ketoacidosis, diabetes mellitus, glargine, cat

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