

New Hope for Diabetic Cats

Advances in veterinary medicine will help owners provide better care for cats with diabetes.

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However, when genetically engineered human insulin became available, veterinarians began using it to treat diabetic cats. Of the many forms of human-derived insulin, lente and ultralente insulin are the most commonly prescribed. Fortunately, cats respond well to these insulin types, although most cats require twice-daily injections.

Recently, a new synthetic analogue, glargine insulin, was approved for the treatment of diabetes in humans. Veterinarians wondered if this insulin would also be effective in cats, especially if given only once daily. A recent study revealed the once-daily administration of glargine insulin to cats provided a significant blood glucose lowering effect, but was not as effective as twice-daily administration. Glargine does appear to provide superior control of the diabetes compared to lente and ultralente insulin.

Although most diabetic cats ultimately require insulin injections to control their diabetes, some cats with type 2 diabetes can rely on oral medications. Several oral medications are available to treat diabetes, but there is scant published data on the effectiveness of these drugs in cats. On the basis of limited data, glipizide and acarbose appear to be the most effective and have the least potential for toxicity in cats, when compared to troglitazone and metformin.

Studies are underway to determine which oral agents, either alone or combined with insulin, best control feline diabetes.

Determining blood-sugar concentrations and serial blood-glucose curves are important aspects of long-term management in diabetic cats. Humans with diabetes monitor their own blood sugar at home with portable blood glucose monitors. Cats, however, go to the veterinary hospital for blood-glucose monitoring.

Recently, however, a technique was described in which owners learned to obtain blood from their cats ears and measure the blood-glucose levels in their homes, using a portable glucose meter. The owners of seven healthy cats performed two glucose curves, measuring blood-glucose concentrations every two hours for a total of 12 hours. Three of the seven owners were able to perform a reliable glucose curve. The study's authors concluded that home monitoring of blood-glucose concentrations may serve as a new tool in the management of diabetic cats.

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