DIABETES MELLITUS

Despite being such a common disease, feline diabetes is often surrounded by much confusion. The disease has many differences when compared with diabetes mellitus in

people (and in dogs), and it can be difficult to manage. However, with the right information and support, and by working closely with their veterinary practice, owners

of diabetic cats usually cope well. Indeed, as an owner, you play a vital role in maximizing the chance of successful treatment.

What is diabetes mellitus?

Diabetes mellitus is a medical condition resulting in an excessive amount of glucose or sugar in the blood. This is caused by a deficiency of insulin, which is a hormone secreted by the pancreas.

The clinical signs seen in diabetes are largely related to the elevated concentrations of blood glucose and the inability of the body to use glucose as an energy source due to the deficiency of insulin.

Diabetes mellitus affects an estimated one in four hundred cats, and is seen more frequently in middle to old-age cats and is more common in males than females.

What are the clinical signs of diabetes mellitus?

The most common clinical signs seen in diabetic patients are an increase in water consumption and urination. Weight loss is also a common feature, and an increase in appetite may be noticed in some cats. Recognition of these signs is variable though, particularly because of the life-style of some cats. If a cat spends a lot of time outdoors, it may drink from ponds or pools of water outside rather than appearing to drink excessively from what is provided indoors. Cats that are fed canned or moist diets receive much of their water intake from their diet and increased water intake will be less easily recognized in these patients.

How is diabetes mellitus diagnosed?

The diagnosis of diabetes mellitus is made based on clinical signs, persistently elevated blood glucose concentration and the presence of glucose in the urine. However, a diagnosis of diabetes cannot be made on a single blood and urine sample as other conditions, in particular stress, may also cause a transient rise in glucose levels. Confirmation of diabetes may therefore require more than one blood sample collected over a period of one to five days.

How is diabetes mellitus treated?

Diabetes mellitus is a treatable condition. Although long-term treatment requires commitment and dedication, it can be rewarding to successfully manage this condition in a beloved pet.

Initial steps in treating a diabetic cat may involve removal of any predisposing causes for the diabetes. For example, the administration of some drugs predisposes cats to develop diabetes and withdrawal of these drugs may lead to resolution of the condition. Obese cats are more prone to develop diabetes and weight reduction can lead to resolution of the signs in some cats.

If there are no predisposing causes, or if correction of the predisposing causes does not lead to resolution of the diabetes, specific treatment is required. Treatment needs to be started promptly with the use of insulin. Twice-daily insulin injections of a small amount of insulin are required. Very small needles are available which cause no pain to the cat. Administration times, dosages and type of insulin will be determined by your veterinarian. When treatment is started promptly with close monitoring, then in up to 50% of cats, the need for insulin may actually resolve, often within the first months of treatment. So being extra vigilant early on can really pay off!

Do treated cats need to be monitored?

Yes, it is important to monitor treatment to make sure it is working properly, and to determine if any insulin dosage adjustments are necessary.

During the initial stages of treatment, glucose curves are required every two weeks until the appropriate dosage of insulin is determined. A glucose curve is performed by testing your cat’s blood glucose approximately every two hours throughout the day. On the day of your scheduled glucose curve you will feed and administer your cat’s insulin injections as usual, and then you will typically drop your cat off at the Cat Hospital by 9:00 am. The cat will stay with us for the day and pick up time is about 5:15 pm. At discharge time you will be instructed on any adjustments to the insulin dosage.

Your diabetic cat should come to see Dr. Gambella every 3-6 months, once they are stable, to have needed bloodwork preformed. Monitoring is essential by both the Doctor and the owner.

It is particularly valuable to keep accurate records of the following information:

Daily records:

• Time of insulin injection

• Amount of insulin injected

• Amount and time of food fed and eaten

• Amount of water drunk

Weekly record:

• Weight of the cat

What happens if my cat receives too much insulin?

If a cat receives too much insulin, it is possible for the blood sugar level to drop dangerously low. For this reason it is important to be very careful in ensuring the cat receives the correct dose of insulin.

The typical signs displayed by a cat with a very low blood sugar level are weakness and lethargy, shaking, unsteadiness and even convulsions. If a diabetic cat shows any of these signs it is important to seek immediate veterinary advice or attention. In mild cases of hypoglycemia, you may observe “wobbling” or “drunken” walk or appearance and the cat may not arouse when you call or pet them. In cases of mild or early hypoglycemia, you should administer approximately a tablespoon or 6 ml of corn syrup by mouth. If your cat is showing signs are displayed such as ataxia or severe incoordination and unsteadiness during walking, or convulsions, you should seek immediate veterinary care. Call the Cat Hospital and we can advise you on specific emergency treatment of low blood sugar in your cat.[[1]](#endnote-1) If we are closed and you need advice or immediate veterinarian care call the nearest animal emergency facility. *Treasure Coast Animal Emergency* is in Vero Beach, their phone number is (772) 569-4500, and *Animal Emergency and Referral Center* is in Fort Pierce, their phone number is (772) 466-3441.

1. **Cat Hospital of Vero Beach**

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