COMPLICATIONS ASSOCIATED WITH INSULIN DEPENDENT DIABETES MELLITUS IN DOG

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SUMMARY

Diabetes mellitus in dog is a metabolic disfunction, characterized by persistent and uncontrolled hyperglycemia, not so well know in our country. Because of the chronic condition of diabetes mellitus, the main risks to health are its characteristic long-term complications. These include acute and chronic complications, as: cardiovascular diseases, chronic renal failure, retinal damage, the most significant cause of adult blindness, nerve damage, erectile dysfunction (impotence), to gangrene and risk of amputation of legs.

A few complications associated with insulin-dependent diabetes mellitus in 48 canine patients were analysed. The diabetic cataract was found in 17 patients (35%) during the ophthamological examination. In diabetic cataract, the lens have the aspect of “air bubbles in a gel solution” or of ”snow flakes” sparsed in all the mass of the lens. The treatment was medicamental or surgical (cataract extraction by phacoemulsification) performed only after the blood sugar level was under control.

The diabetic foot also known as the Charcot foot (in human medicine) was suspected in only one patient as an association of diabetic microangiopathy, macroangiopathy and neuropathy, including immune deficiency. The diagnosis was suspected based on the clinical findings characterized by erythema, edema and elevated temperature of the foot that can clinically mimic gout. The plain film radiographic findings was normal in the acute phase of Charcot foot. The treatment was nonsurgically, and included nonsteroidal anti-inflammatory drugs, neurotrophic agents and low-laser therapy.

Diabetic ketoacidosis is an acute, dangerous complication and is always a medical emergency. From the total number of cases, diabetic ketoacidosis occured in 5 (10,4%) patients and 2 of them died due to their condition and the time they where presented in the clinic.

Among the most common acute complication in the dogs in our study that were receiving insulin injections was hypoglycemia (14 cases, 29% ). Symptoms included weakness, lethargy, shaking, ataxia, seizures, and in severe situations, coma. Mild cases of hypoglycemia were resolved by offering the animal food. The severe cases were treated with glucose 5% i.v. The distinction between the hyperglycemic coma and the hypoglycemic one was based on the determination of glucosuria.

The complications were less common and less severe in the patients who had optimal controled blood sugar levels and presented no resistance to insulin treatment.

BIBLIOGRAPHY