Canine insulinoma: A Case Report

Otavio Monteiro
UNIFEOB School of Veterinary Medicine, Brazil

Insulinomas or beta cell tumors, are pancreatic insulin-secreting neoplasias which are rarely diagnosed in dogs. However, it is recognized to be the most common islet of Langerhans cell tumors in dogs. Although cases have been reported in younger dogs, insulinoma occurs most frequently in middle aged to older dogs with an average age of nine years³. An 11-year-old male Poodle was presented to the Veterinary Hospital in São João da Boa Vista, SP, Brazil with polyphagia, history of rapid weight gain in the last six months, episodic weakness, cyanotic mucous membranes and convulsions after exercise. Serum chemistry performed showed sustained marked hypoglycemia (41-30 mg/dL). A complete blood count and serum biochemistry profile were within reference ranges. An abdominal ultrasound and radiographs examination showed no significant changes. The patient showed epilepticus status throughout internment. Hyperglycaemic therapy was unsuccessful and after eleven days of treatment, the owners decided for euthanasia. Necropsy revealed mildly enlarged pancreas with 3 individual, hard, roughly round white masses of about 0,5 cm in diameter. All tissues were submitted for routine histopathologic examination that reveals monomorphic polygonal cells, typical of neuroendocrine packeting. Cells have moderate amounts of finely granular eosinophilic cytoplasm, basilar or centrally located round nuclei, clumped chromatin, and a single prominent nucleolus. Neoplastic beta cells secrete insulin independent of blood glucose concentration, resulting in persistent and unregulated hypoglycemia. As a consequence, hypoglycemia of the central nervous system leads to the clinical signs of seizure and coma.

Biography

Otavio Monteiro is Brazilian born 25 year old Veterinary Medicine student currently coursing his fifth semester at UNIFEOB School of Veterinary Medicine in São João da Boa Vista SP, Brazil. After concluding his high school in Philadelphia, PA returned to brazil to iniciate his studies in the veterinary branch. He has previously published case reports and retrospective studies in the pathology area, and is now working on his first scientific initiation.

otaviomonteiro64@gmail.com