

NUTRITIONAL AND MEDICAL MANAGEMENT OF A MALE SOUTH AFRICAN CHEETAH (*ACINONYX JUBATUS JUBATUS*) DIAGNOSED WITH HYPERLIPIDEMIA DUE TO HYPERTRIGLYCERIDEMIA AT CINCINNATI ZOO & BOTANICAL GARDEN

Barbara A. Henry, MS, Julia A. LaFrankie, Michael R. Wenninger, DVM, CertAqV, and Jennifer A. Nollman, DVM*

Cincinnati Zoo & Botanical Garden, Department of Animal Health, 3400 Vine Street, Cincinnati, Ohio, 45220, USA.

Abstract

A 4.5-year-old male South African Cheetah (*Acinonyx jubatus jubatus*) in human care presented for evaluation of vomiting that occurred weekly following consumption of horse neck bones. Physical examination and diagnostics were performed. Examination and initial results were unremarkable aside from a mildly increased aspartate aminotransferase (AST), but when rechecked one month later, markedly elevated AST and alanine aminotransferase (ALT) were found. Increases were consistent with hepatocellular damage. Serum was also consistently grossly lipemic. Ultrasound guided liver biopsy was performed. Results showed vacuolar hepatopathy, a nonspecific change associated with many maladies including derangements of lipid metabolism. Blood work at time of anesthesia showed improved liver values, but serum was still lipemic. Investigation showed lipemia secondary to marked hypertriglyceridemia which persisted at recheck blood work one month later. Initial management using diet modification and omega-3 fatty acid supplementation was inadequate, so gemfibrozil was added to decrease hepatic production of triglycerides. A combination of dietary fat reduction and gemfibrozil resolved hypertriglyceridemia and associated lipemia. Through close dietary and medical management, this cheetah has maintained acceptable triglyceride levels and good body condition and has not experienced further negative sequelae.