Diabetic ketoacidosis (DKA) in dogs is a complication of unregulated diabetes mellitus (DM) that produces marked hyperglycemia, profound metabolic acidosis and hyperketonemia in severely affected patients and possibly death. A case of diabetic ketoacidosis in a 5 month female Labrador pup is placed on record.

Materials and Methods

A five month old female Labrador weighing about 9 kg was brought to the Small Animal Medicine Unit of the Madras Veterinary College Teaching Hospital in lateral recumbency with reduced reflexes and anorexia for the last 7 days. The animal was reported to be treated by a local veterinarian for the past one month for polydipsia, polyuria and weight loss in spite of good appetite. Detailed examination of the patient revealed retarded growth, fixed expression, pale and dry conjunctiva mucosa, loss of skin turgor, sunken eye balls, dry oral mucosa, CRT>3 sec. There were reduced reflexes, cataract and halitosis. Rectal temperature, heart rate, respiratory rate and systolic blood pressure were 37.2°C, 124 bpm, 46/min and 70 mm Hg respectively. Blood examination revealed normal haematology (Hb 12g / dl, PCV 40 %, RBC 6.24 X 10^6/cmm and WBC 18,100/cmm). BUN, creatinine, total protein, serum albumin, serum globulin, blood glucose, sodium and potassium were 13.10 mg/dl, 0.76 mg/dl, 6.4g/dl, 2.03 g/dl, 3.37 g/dl, 323.56 mg/dl, 134 mEq/L and 4 mEq/L respectively.

Urinalysis revealed specific gravity of 1.03, pH of 6, ketonuria and glycosuria. The clinical manifestations and laboratory findings were diagnostic of juvenile diabetic ketoacidosis.

Results and Discussion

The dog was treated with normal saline @ 20 ml/kg bw i/v along with regular Insulin at the initial loading dose of 0.1 U/kg continuous rate infusion, amoxicillin – cloxacillin @ 20 mg/kg bw i/v. Despite insulin therapy the pup succumbed the next day. The owner was unwilling for a post-mortem examination. The spontaneous development of diabetes with ketoacidosis in this pup could possibly be due to either any autosomal recessive disorder (Kramer, 1981) or abiotrophy of islet beta cells which may presumably has a genetic basis as described by Rand et al. (2004). The diabetic pup was able to live without insulin therapy for 5 months. However, there were distinct clinical signs such as development of cataract, glycosuria, ketonuria, ketoacidosis, hyperglycemia and growth retardation as also reported by Ji-Houn et al. (2008). Mild hyponatraemia was also observed which could be the result of natriuresis as a result of osmotic diuresis and insulin deficiency (as insulin promotes distal renal tubular sodium resorption), a dilution effect of hyperglycaemia along with gastrointestinal losses (Hume et al., 2006). The pup did not survive possibly due to delayed presentation to the hospital at the end stage of the disease wherein there was severe
Gastro-Intestinal Adenocarcinoma in a Lion

K. Sujatha¹, Ch. Srilatha, N. Sailaja and P. Amaravathi

Department of Pathology, College of Veterinary Science, Sri Venkateswara Veterinary University, Tirupati 517502, Andhra Pradesh, India

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Adenocarcinoma is a malignant tumor of glandular epithelium and its occurrence in wild animals is sporadic and it mostly occurs in the adult and aged animals (Rao et al., 2000). The present paper describes a case of adenocarcinoma in a lion.

Materials and Methods

A 20 years old lion belonging to S.V. Zoological Park, Tirupati was brought for necropsy with a clinical history of unthriftness, loss of weight, vomiting and distension of abdomen. Necropsy revealed creamy white colored fluid about 10 to 15 liters with fibrin plaques in peritoneal cavity. Pieces of representative tissues were collected into 10% formal saline for histopathology and sections were cut 4 microns thickness and stained with Haematoxylin and eosin.

Results and Discussion

Grayish white irregular cauliflower like multiple polypoid masses measuring 0.5 to 10 cm in diameter were seen projecting into the lumen of mucosa of stomach, caecum, colon, and more obliterative growths in the rectum. Intestinal wall was thickened. Metastatic lesions were seen in mesenteric lymph nodes. The other changes included cyanotic discoloration of lungs and cirrhotic changes in liver.

Microscopically, tumor cells were cuboidal to columnar in nature and were arranged in acinar pattern with extensive stromal fibrosis. Extensive invasion of

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¹Corresponding author: Email: karamalasujatha@gmail.com