

ABSTRACT-(JCDR-2012, VOLUME-VIII)

Canine Research

1. ADVANCES IN DIAGNOSIS AND TREATMENT OF CANINE DEMODICOSIS

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ABSTRACT

Demodicosis is a skin disease caused by demodectic mites. Two clinical forms of the disease, localized and generalized have been recognized. Hair loss with more or less inflamed skin lesions is noticed. There are many new advanced diagnostics approaches used currently like Trichography technique, Acetate tape preparations, Scanning electron microscopy (SEM), histopathology studies, hematological studies and histochemical studies are reported.

Key World: Advanced diagnosis, canine, demodicosis, treatment.

2. UPDATE ON CALCIUM OXALATE UROLITHIASIS IN CANINE

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ABSTRACT

Calcium oxalate is the second most common urolith in dogs and frustrating problem for veterinary practitioners. Frustration arises from the lack of knowledge about the reasons for urolith formation and hence, the inability to develop specific therapies to prevent their formation. Additionally there is no known therapeutic protocol to cause these stones to dissolve. Predisposing factors are breed, old age, male sex and certain diseases. As medical dissolution is very difficult in these stones so, management should be focused on physical removal and prevention in patients with frequent reoccurrence. Prevention can be done by diet modification, increased water intake and appropriate use or avoidance of specific medications.

Key Words: Calcium oxalate, canine urolithiasis, management, risk factors.

3. EPIDEMIOLOGICAL STUDY OF CANINE ARRHYTHMIAS

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ABSTRACT

Epidemiological study was conducted to determine the prevalence of cardiac arrhythmias in dogs by retrospective analysis of electrocardiographs. The overall prevalence rate and occurrence of arrhythmia in dogs was 10.67% (96/900) and 64% (96/150), respectively. Fourteen types of arrhythmias were diagnosed on electrocardiographic examination. The arrhythmias were classified into three categories viz. sinus rhythm arrhythmias (76.04%), arrhythmias owing to impulse formation (14.58%) and arrhythmias owing to impulse conduction (9.37%). Labrador, Pomeranian, nondescript and German shepherd dogs predominated the scene with higher frequency of arrhythmia in male dogs. Dogs more than 6 year old had high frequency of arrhythmia.

Key words: Arrhythmia, canine.

4. HAEMATO-BIOCHEMICAL AND ELECTROLYTE CHANGES IN DOGS SUFFERING FROM CANINE PARVOVIRUS (CPV) INFECTION

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ABSTRACT

This study was conducted to record haemato-biochemical and electrolyte changes in dogs suffering from canine parvovirus (CPV) infection. Out of 60 dogs examined 18 were found positive for CPV by using CPV Ag Test Kits (BIOCBD).Haematological parameters Hb, PCV, TLC and TEC of these dogs showed significant decrease before treatment with increase up to control values after treatment. A significant decrease in neutrophils was observed on 1st day of treatment, which increased and decreased in group-I (with immunopromoter) and group-II(without immunopromoter), respectively on 5th day of treatment. A significant increase in eosinophils and monocytes were observed on 1st day of treatment which decreased on 5th day of treatment.Blood biochemistry revealed increase in serum catalase, super oxide dismutase, sodium, potassium, calcium, phosphorus, aspartate amino transferase, alanine amino transferase, alkaline phosphatase, total protein and serum creatinine in both groups compared to healthy control group on 1st day of treatment.

Key words: Antioxidant enzymes, canine parvovirus, dogs, electrolytes, haematological parameters, serum enzyme- AST, ALT and ALP.

5. PREVALENCE OF URINARY TRACT DISORDERS IN DOGS

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ABSTRACT

The present study was carried out to determine the prevalence of Urinary Tract Disorders (UTDs) in dogs in and around Jammu. Dogs suspected for urinary tract disorders were examined and treated in Referral Veterinary Teaching Hospital. The diagnosis was based on history, clinical sign and symptoms. Confirmatory diagnosis was done by haematobiochemical, urine and ultrasonographic examination. The prevalence of UTDs was found to be 3.22 per cent (28/867) with maximum occurrence in the month of May (17.85%). Males (60.71%) were more affected than female with highest prevalence in Labrador breed (46.42%). Dogs in the age group of old age (>8 year) were found most susceptible (67%) to UTDs. Category wise acute renal/kidney injury and Chronic kidney disease were found to be 50 percent each. On etiology based classification of UTDs intrinsic-renal (35.71%) was most encountered disorder followed by pre-renal and post-renal. Upper UTDs were more common (67.86%) than lower UTDs.

Key words: *Canine, disorder, prevalence, urinary tract.*

6. BIOCHEMICAL AND ENZYMATIC STATUS IN ARRHYTHMIC DOGS

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ABSTRACT

Biochemical constituents and enzyme chemistry in arrhythmic dogs were studied in 39 dogs including 10 apparently healthy dogs. The blood urea was high in dogs suffering from sinus tachycardia, atrial arrhythmia and bradycardia. Blood glucose level was higher in tachycardia and lower in bradycardia. Total serum protein was decreased in tachycardia and atrial arrhythmias; and increased in bradycardia. Low level of Serum cholesterol and triglyceride were observed in dogs with tachycardia, atrial arrhythmia and bradycardia. Values of aspartate amino transferase, alanine amino transferase and lactate dehydrogenase were higher and creatinine kinase was lower in tachycardia, atrial arrhythmia and bradycardia.

Key words: *Arrhythmia, biochemical, dog, enzymatic status.*

7. POST-TRAUMATIC VENTRICULAR TACHYCARDIA IN A DOG AND ITS THERAPEUTIC MANAGEMENT

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ABSTRACT

A case of ventricular tachycardia was diagnosed and successfully managed in a dog who met with an accident but without any piercing injury. Cardiac auscultation was characterized by tachycardia. Electrocardiograms revealed a series of ventricular premature complexes with fusion and capture complexes. Immediate treatment with lidocaine diazepam and fluid therapy with Ringer's Lactate and follow up with oral phenytoin for 2 weeks resolved ventricular tachycardia.

Key words: *Diazepam, lidocaine, phenytoin, ventricular premature complex, ventricular tachycardia.*

8. ANTIMICROBIAL SUSCEPTIBILITY OF MICROBES ISOLATED FROM OTITIS EXTERNA OF DOGS

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ABSTRACT

In a study six samples from dogs with otitis externa were processed for bacterial isolation. Out of six samples processed Staphylococcus sp. could be isolated from two and one sample had Enterobacter sp. From three samples bacteria could not be isolated. Antimicrobial susceptibility test were performed on these isolates using twenty four antibiotics. The Staphylococcus sp. were sensitive to fourteen antibiotics which included Amikacin, Enrofloxacin, Rifampicin, Ceftazidime, Oxacillin, Minocycline and Nitrofurantoin, and showed resistance to Cephotaxime, Tetracycline and Co-Trimoxazole. Enterobacter sp. was sensitive to nine antibiotics which included Gentamicin, Tetracycline, Trimethoprim, Nitrofurantoin and Co-Trimoxazole, and showed resistance to Rifampicin, Oxacillin, Clindamycin, Erythromycin, Ceftazidime and Vancomycin. All the bacterial isolates showed sensitivity for Nitrofurantoin, Colistin, Gentamicin and Amikacin.

Key words: Antimicrobial, dog, otitis externa.

9. HEMANGIOPERICYTOMA IN A GERMAN SHEPHERD DOG

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ABSTRACT

A dog was presented with complains of a firm and round swelling at croup region. Histopathology of the biopsy sample revealed spiral proliferations around blood vessels with a typical “finger print” arrangement of cells disposed concentrically around the collapsing hyalinised capillaries confirming it to be hemangiopericytoma. The tumor was excised under xylazine, ketamine and diazepam. Metronomic therapy with piroxicam and Cyclophosphamide was initiated after surgery. The recovery was uneventful.

Key words: Cyclophosphamide, Hemangiopericytoma, Piroxicam.

10.THERAPEUTIC MANAGEMENT OF CONCOMITANT BABESIOSIS, EHRLICHIOSIS AND HEMOBARTONELLOSIS IN DOG – A Case Report

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ABSTRACT

A 2 years old German Shepherd female dog was brought to the Teaching Veterinary Clinical Complex (TVCC), Jabalpur with the history of recurrent fever, inappetence and lethargy. On clinical examination, there was fever (104.2°F), pale mucus membranes and tachycardia. Blood smear examination revealed presence of *Babesia canis*, *B. gibsoni*, *Ehrlichia canis* and *Hemobartonella canis*. For the treatment doxycycline was administered orally 10 mg/kg b wt daily for 21 days, along with hematinics. After 8 days of completion of doxycycline therapy fever was reported again. Blood smear examination revealed the presence of *Babesia sp.* Diminazine aceturate was given 4 mg/kg bwt along with Prednisolone 1 mg/kg b wt po bid was given initially for 3 days, followed by withdrawal in a tapering dose over 2 weeks. The animal recovered completely from the concomitant babesiosis, ehrlichiosis and hemobartonellosis after the therapy.

Key words: Babesiosis, dog, doxycycline, ehrlichiosis, hemobartonellosis.1

11. DIAGNOSIS AND TREATMENT OF *BABESIA CANIS* INFECTION IN A DOG IN NORTH EASTERN INDIA- A Case Report

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ABSTRACT

A case report of the Labrador dog positive for *Babesia canis* infection diagnosed by clinical signs and presence of parasites in Geimsa's stained peripheral blood smear is presented. Haematological analysis evidenced thrombocytopenia with decreased haemoglobin and PCV. Infected dog has shown considerable change in biochemical profile for SGOT, total bilirubin and globulin. The dog was treated with Diminazene aceturate in conjunction with clindamycin and responded well with therapy.

Key words: *Babesia canis, clindamicin, diminazineaceturate.*

12. OTITIS IN CANINE

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ABSTRACT

Three cases of dogs reported with history of shaking of head, itching, restlessness and scratching of the ears and were clinically diagnosed as otitis media in two German Shepherd dogs (GSD) and otitis externa in Spitz. Culture and sensitivity of ear discharge revealed the presence of *Staphylococcus* spp. and *Enterobacter* spp. each in both GSD and *Staphylococcus* spp. in Spitz. The higher sensitivity were recorded with many antimicrobials including enrofloxacin. The dogs were treated successfully by enrofloxacin, prednisolone, pomisol ear drops and cleaning of ear canal with 1% hydrogen peroxide.

Key words: *Culture, enrofloxacin, otitis media, prednisolone, sensitivity.*

13. CANINE DISTEMPER IN A PUP – A Case Report

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ABSTRACT

A pup aged 48 days with no clinical illness was presented to the clinic for immunization. On clinical examination slight conjunctival discharge was noticed. The pup was found positive for CD by the conjunctival swab by using canine distemper Ag test kit. Therapy included 5% DNS, multivitamins, ascorbic acid, ceftriaxone and digestive enzymes. After 11 days the pup started showing the clinical symptoms like retching, respiratory involvement and neurological complications. The pup collapsed on the 2nd day after clinical symptoms appeared.

Keywords: *Ag test kit, canine distemper, pup.*

14.MANAGEMENT OF GENERALIZED IDIOPATHIC EPILEPSY IN A DOG – A Case Report

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ABSTRACT

A male four year old Spitz dog was referred with the complaint that the animal had seizures occurring at a frequency of about 7-10 days. The dog was treated for more than a year with phenobarbital for epilepsy. Based on the clinical, hematological and biochemical studies, a diagnosis of generalised idiopathic epilepsy was reached which was refractory to treatment with phenobarbital alone. The dog was successfully treated with Levetiracetam and Phenobarbital.

Key words: Dog, generalized idiopathic epilepsy, levetiracetam, phenobarbital.

15.DEMODICOSIS AND ITS THERAPEUTIC MANAGEMENT IN A DOG

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ABSTRACT

A Pug dog aged about 6 months with the symptoms of anorexia, excessive itching, hair loss, redness of skin on face and ventral aspects on neck to the clinic. Skin scrapping revealed presence of Demodex canis. The dog was treated with Ivermectin, Benzoyl Peroxide and Amitraz with complete clinical recovery within 15 days of start of treatment.

Key words: Demodicosis, dog, skin scraping.

16.AMITRAZ POISONING IN A SPITZ DOG - A Case Report

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ABSTRACT

A two year old Spitz with the history of an accidental oral consumption of Amitraz was reported to the clinic. It had discomfort with little crying, ataxia, mild salivation, bradycardia and cold extremities. This dog was treated successfully with 5% DNS, isopredone acetate, adrenaline, vitamin B, B2 & B3, livofloxacin plus ornidazole and liver tonic.

Key words: Amitraz poisoning, canine, therapeutic management.

17.PERINEAL HERNIOPLASTY USING AN ACELLULAR DERMAL MATRIX IN A DOG

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ABSTRACT

Successful perineal hernioplasty using an acellular dermal matrix in a dog with perineal hernia is reported.

Key words: Acellular dermal matrix, hernioplasty

18.AUTOLOGOUS BONE MARROW-DERIVED MESENCHYMAL STEM CELL THERAPY FOR CHRONIC ULCERATIVE WOUND IN A DOG

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ABSTRACT

A six years old female non-descript dog was presented with chronic non-healing ulcerative wound on dorsal aspect of neck region since five months. Successful bone marrow derived mesenchymal stem cells therapy for dog with a recovery period of 25 days is reported.

Key words: Chronic ulcerative wound, dog, stem cell therapy.

19.C-ARM GUIDED RETRIEVAL OF FOREIGN BODY FROM A DOG

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ABSTRACT

A Labrador dog was presented with a history of drooling salivation along with anorexia and inability to close the mouth and pain at the cervical esophageal area on palpation. Radiography revealed a linear foreign body obstruction in the pharyngeal region which was found to be a sewing needle after its successful removal under C-arm guidance.

Key words: Linear foreign body, C-Arm.

20.SURGICAL MANAGEMENT OF FEMUR FRACTURE IN DOGS

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ABSTRACT

A study was conducted on 2 dogs with the history of accidental trauma. Femur diaphyseal fracture was diagnosed through clinical and radiological examinations. In one dog Thomas splint was applied while in another dog intramedullary pinning was done. Uneventful recovery was recorded in both the cases.

Key words: Dog, femur diaphyseal fracture, intramedullary pinning, thomas splint.

21.PEOTOMY IN A DOG FOR SURGICAL MANAGEMENT OF PARAPHIMOSIS

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ABSTRACT

A nondescript male dog weighing 15 kg was presented with the complaint of hematuria, stranguria and paraphimotic penis for last one month due to a tumorous growth, 3-4 cm anterior to the bulbus glandis. Self mutilation by the dog had caused extensive trauma to glans penis with deep wounds exposing the os penis, hence peotomy was performed and dog was given vincristine sulphate at weekly interval for 3 weeks. The dog made an uneventful recovery with normal micturation.

Key words: Dog, peotomy, penile neoplasia, vincristin.

22.HYPERPLASIA OF THIRD EYELID GLAND AND ITS SURGICAL MANAGEMENT IN DOGS

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ABSTRACT

A clinical study was conducted on 5 clinical cases of protrusion of third eyelid gland. All the 5 cases were presented to the clinic with the history of pinkish follicular mass protruding from medial canthus of the eye. Conjunctivitis was seen and profuse lacrymation was noticed. The condition was diagnosed as hyperplasia of third eyelid gland by clinical examination. Protrusion was surgically removed under general anaesthesia. No complication occurred and recovery was uneventful.

Key words: Dog, hyperplasia, third eyelid gland.

23.TOPICAL APPLICATION OF CALENDULA FOR TREATMENT OF WOUNDS IN CASE OF CANINE

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ABSTRACT

The wound healing efficacy of Calandula tincture and oint. Vetbasin(Agri Vet Farm Care) was evaluated in dogs. In present study it was observed that calendula tincture produced maximum wound healing activity (71.24%), as compared to oint. Vetbasin (57.44%) on clinical cases of wounds.

Key words: Calendula, ovariohysterectomy, wound healing.

24.EYE DERMOID IN A DOG AND ITS SURGICAL CORRECTION

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ABSTRACT

A Rottweiler dog was presented for repair of congenital dermoid in the left eye. The patient suffered from chronic epiphora and ocular discharge for last 3 months. On clinical examination, a growth of hairs was observed over cornea. The condition was diagnosed as corneal dermoid in left eye. The animal was anaesthetized and the corneal dermoid was completely excised and a conjunctival flap was placed to support the re-epithelization and aid vascularization of the defect. The dog recovered uneventfully.

Key words: Dog, dermoid, eye.

26 ACUTE RENAL FAILURE IN INDIAN LEOPARD

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ABSTRACT

The present study describes the clinical management of acute renal failure(ARF) with hematuria in Indian leopard at Manda Zoo of Jammu. The complete blood count and haematobiochemical parameter showed leukocytosis and severe azotemia. Urinalysis indicates increased number of pus cells, red blood cells, moderate albuminuria and mild glucosuria. Leopard recovered clinically with intensive fluid therapy.

Key words: Acute, leopard, renal failure.

