

Proceedings

tive Processes in Injured Peripheral Nerve Induced by Low-Level Laser Therapy. Photomed Laser Surg [Internet]. 2007; 25(2):107-11.

 Fillipin LI, Mauriz JL, Vedovelli K, Moreira AJ, Zettler CG, Lech O, et al. Low-level laser therapy (LLLT) prevents oxidative stress and reduces fibrosis in rat traumatized Achilles tendon. Lasers Surg Med. 2005; 37(September):293-300.

*Corresponding author:

Virginia Moraleda - GREFA, C/ Monte Del Pilar, 28220 Majadahonda, Madrid, C.P. 28220, Spain E-mail: virginia@grefa.org

P-15

REHABILITATION OF BIRDS IN THE TAFIRA WILDLIFE REHABILITATION CENTER IN GRAN CANARIA ISLAND, SPAIN: 2003-2013

JORGE ORÓS^{1*}, DVM, PhD, Dip. ECZM; NATALIA MONTESDEOCA¹, DVM; JUAN A. CORBERA¹, DVM, PhD; PASCUAL CALABUIG², DVM

¹ From the Veterinary Faculty, University of Las Palmas de Gran Canaria, Arucas, Spain ² From the Tafira Wildlife Rehabilitation Center, Gran Canaria, Spain

ABSTRACT

Birds have widely used as sentinels of ecosystem health, showing that birds living on islands with high human population density may be at higher risk. Human participation through wildlife rehabilitation centers is essential for conservation purposes. A total of 2,515 birds (excluding raptors and seabirds) belonging to 16 taxonomic orders admitted to the Tafira Wildlife Rehabilitation Center in Gran Canaria Island, Spain, from 2003 to 2013 were studied. Primary causes of morbidity were classified into eleven categories: trauma, fishing gear, infectious/parasitic disease, metabolic/nutritional disease, glue trapping, orphaned young birds, crude oil, toxicosis, captivity, other causes, and unknown/undetermined. Overall (and also stratified by causes of admission) euthanasia (E), unassisted mortality (M), release (R), and permanent captivity (C) rates were also calculated. Eurasian Thick-knee (Burhinus oedicnemus) (n=496) and Eurasian Blackbird (Turdus



merula cabrerae) (n=339) were the species most frequently admitted. The most frequent causes of morbidity were orphaned young (25.8%), trauma (25.6%) and unknown/undetermined (23.4%). Among the birds admitted alive (2,276) the overall rates were: E=16.7%, M=26.5%, R=54%, C=2.7%. Birds admitted due to metabolic/nutritional diseases had the highest M values (48.5%). Among birds included in our study four species are currently included in the Spanish Catalogue of Menaced Species as "vulnerable" and three species as "in danger of extinction". M and R rates were worse that rates obtained in the rehabilitation of raptors and seabirds in the same period.

*Corresponding author: Veterinary Faculty, University of Las Palmas de Gran Canaria, Trasmontana s/n, 35413 Arucas (Las Palmas), Spain E-mail: jorge.oros@ulpgc.es

P-16

REAL-TIME PCR AND IMMUNOHISTOCHEMICAL DETECTION OF JAPANESE ENCEPHALITIS VIRUS (JEV) IN MYELOID LINEAGE CELLS OF YOUNG WILD BIRDS IN TUSCANY

S. PREZIUSO*, DVM, Ph.D.;S. MARI, G. ROSSI, DVM, Ph.D., Dipl. ECZM (WHP)

School of Biosciences and Veterinary Medicine, University of Camerino, Matelica, Italy

ABSTRACT

Japanese Encephalitis Virus (JEV) can be responsible for encephalitis in humans and horses and for reproductive disorders in pigs. Birds are amplifying hosts and JEV has been detected in different organs. There are no published data showing the presence of the virus in the organs of healthy birds, captured during inter epidemic periods. We report the results obtained from samples from 12 young birds collected in Italy in 2011 - 2012.

Serial sections from formalin-fixed and paraffinembedded tissue samples were routinely processed for histopathology, immunohistochemistry (IHC; pAb, PG 10004, *Genesis Biotech Inc.*) and Sybr Green real time PCR.

POSTER Avian

Proceedings



IHC to JEV was positive in 9 of 12 bone marrows, showing reaction products in stem cells concurrently positive also for anti CD11b antibody. Four of 12 bone marrows were positive by real time PCR, while other samples showed low quality nucleic acids.

JEV localization in bird's bone marrow myeloid lineage cells, suggest that monocytemacrophage precursors may represent a target cell for the virus, as recently demonstrated in the arbovirus Chikungunya virus. Our results suggest that birds could be reservoir for JEV maintaining myeloid cells persistently infected with the virus.

*Corresponding author:

Silvia Preziuso - Via Circonvallazione, 93/95 62024 Matelica (MC), Italy E-mail: silvia.preziuso@unicam.it

P-17

BUMBLEFOOT IN BIRDS ADMITTED IN A WILDLIFE REHABILITATION CENTRE

CLARA RODRÍGUEZ DÍEZ^{1,2*}, LV;

CASILDA RODRÍGUEZ FERNÁNDEZ², DVM, PhD; IRENE LÓPEZ MÁRQUEZ¹, LV; LAURA SUÁREZ REGALADO¹, LV; VIRGINIA MORALEDA FERNÁNDEZ¹, LV; FERNANDO GONZÁLEZ GONZÁLEZ¹, LV

¹ From GREFA, Majadahonda, Madrid, Spain ² From Dept. of Toxicology and Farmacology, Faculty of Veterinary, UCM, Madrid, Spain

ABSTRACT

Bumblefoot is a chronic and progressive infectious disease of the birds' footpad, specially associated with captivity. The main objective of the study has been to analyze the influence of environmental, physiologic and pathologic factors which could propitiate this disease in wild raptors after their admission in a rehabilitation center. A preliminary retrospective dynamic cohort study has been carried out based on clinical cases of raptors admitted in a rehabilitation centre during 7 years. According to the severity of the injury, bumblefoot has been sorted in three stages, by an adaptation of Cooper's classification.¹ Non parametric tests, survival curves and classification with the decision tree analysis have been applied. Prevalence of bumblefoot was 6,9%, with an incidence density of 0,019 cases per 100 bird-years at risk. Our results showed a greater bumblefoot predisposition dependent on time exposition to captivity, family, age, body condition score, season of admission, status and cause of admission. The joint evaluation of these variables suggested that adult and subadult raptors of Accipitridae family admitted in autumn present the most elevated risk of suffering bumblefoot. The individualized therapy performed in the rehabilitation center has achieved a complete healing in 51% of the cases. Bumblefoot prognosis worsens as the condition aggravates, therefore, prevention, an early diagnosis and the elimination of the factors which could have led to the pathology are critical points for its treatment.

REFERENCES

 Cooper, J. E. Veterinary aspects of captive birds of prey. Gloucestershire, UK. The Standfast Press; 1985.

*Corresponding author:

Dept. of Toxicology and Farmacology, Faculty of Veterinary, UCM, Madrid, Spain E-mail: kla_49@hotmail.com

P-18

INFILTRATIVE CARCINOMA IN SCARLET MACAW (ARA MACAO)

VERONIKA SOCHORCOVA1*, DVM;

GERRY M. DORRESTEIN², DVM, Ph.D, Dipl. ECZM, Dipl. ECAMS; IVA SLANA³, MSc., Ph.D; PETR FICTUM⁴, DVM, Ph.D; ZDENEK KNOTEK¹, DVM, Ph.D, Dipl. ECZM (herpetology)

¹ Avian and Exotic Animal Clinic, Faculty of Veterinary Medicine, University of Veterinary and Pharmaceutical Sciences Brno, Czech Republic

- ² Dutch Research Institute for birds and Exotic
- Animals, NOIVBD, Veldhoven, Netherlands
- ³ VeterinaryResearch Institute, Brno, Czech Republic ⁴ Department of Pathological Morphology and
- Parasitology, University of Veterinary and
- Pharmaceutical Sciences Brno, Czech Republic

ABSTRACT

A twenty-year-old female scarlet macaw was presented with a mass near the cloaca. Physical

