
Bacterial endocarditis is a septic inflammation of the valvular and/or mural endocardium. The epidemiology and prevalence of this disease in dogs may vary depending on the geographic area and population studied. The epidemiology, prevalence and pathology of bacterial endocarditis in dogs were studied based on a 5-year review of the records of the Veterinary Hospital and Section of Veterinary Pathology, UFRGS, Porto Alegre, RS, Brazil. From 2000 to 2005, 54 cases were diagnosed in dogs at necropsy (54/3136, corresponding to 1.72% of the total number of dogs necropsied in our laboratory during this period). The median age of affected dogs was 8.2 years. Males were more frequently affected than females (32/54 versus 22/54). The disease was most frequently diagnosed in purebred dogs (37/54) and the two large breeds most frequently affected were the German Shepherd Dog (9/54) and the Fila Brasileiro (8/54). The mitral valve was most commonly affected (30/54). In 42 out of 54 cases, a potential portal of bacterial entry was identified, with ulcerated/inflamed skin lesions being the most common source of infection (31/42). In 10 out of 42 cases, these skin lesions were infected by screwworm fly Cochliomyia hominivorax larvae (myiases). Streptococci were the most frequent bacteria cultured from blood samples collected at necropsy (6/17). Septic thromboembolism with infarcts in multiple organs and tissues was present in 46 dogs (46/54), with the kidney (38/46) and spleen (24/46) being most frequently affected. Because of nonspecific clinical signs, the ante mortem diagnosis of canine bacterial endocarditis is challenging. This retrospective case series could be useful in the clinical diagnosis of this condition.

**GUIDELINES FOR SYSTEMATIC SKIN PHENOTYPE ANALYSIS OF MUTANT LABORATORY MICE: 1. PILOSEBACEOUS PHENOTYPING.** J. P. Sundberg, L. E. King, Jr., R. Paus. The Jackson Laboratory, Bar Harbor, ME, USA; Skin Disease Research Center, Vanderbilt University, Nashville, TN, USA; and Department of Dermatology, University Hospital Schleswig-Holstein, University of Lubeck, Lubeck, Germany.

Pilosebaceous units (hair follicle + sebaceous gland) are complicated anatomic structures that are generated by highly organized terminal differentiation of epibulial cells under the stringent control of an inducible mesenchyme arising from prototypic neuroectoderm-mesodermal interaction systems. Not surprisingly, these complex biofactories for pigmented keratin-fibers are extremely sensitive to genetic manipulation varying from very obvious to not so obvious hair fiber changes in mutant laboratory mice. Identifying such less obvious changes may be very difficult. Published claims that a novel mutant mouse does or does not show any skin or hair phenotype often turn out to be erroneous. These interpretation errors imply that uniquely instructive insights into previously unknown biological functions of the expressed gene product in question in skin and hair follicles are often missed. Therefore, a minimal set of guidelines needs to be developed and followed to the chances that a discrete, yet biologically highly instructive phenotype is not missed. Two laboratories independently summarized and blended the essentials of analysis of functional pilosebaceous unit morphology, anatomy, and cycling. The resultant merger of these two well established hair phenotype analysis protocols provides pragmatic, validated, systematic, yet-easy-to-apply guidelines to analyze the pilosebaceous unit phenotype of defined age groups of mice. These guidelines include advice on how, where, and when to harvest and process skin samples for histology and immunohistochemistry, essential panels of antibodies, and special histotechnical stains to use, and instructive ancillary methods. Standard approaches to interpreting results using a quantitative approach to hair follicle histomorphometry, careful distinction between hair follicle subtypes, as well as normal anatomic structures are proved http://eulep.anat.cam.ac.uk/~skinbase/index.php.

**HEMaturIA ASSOCIATED WITH CALCIFICATION OF RE-NAL TUBULES IN CAMELS (CAMELUS DROMEDARIUS).** R. K. Tanwar. Department of Epidemiology and Preventive Veterinary Medicine, College of Veterinary and Animal Science, Bikaner-334001.

Chronic hematuria in five male camels (Camelus dromedarius) of 8-12 years of age was investigated. These animals had a history of hematuria for the last 1-2 months. Temperature, pulse, respiration, water intake, appetite and urine output were within normal range. Microscopic examination of urine sediment revealed large number of intact erythrocytes. These camels did not respond to treatment with antibiotics and haemostatics drugs. Cultural examination revealed no growth of bacteria. Serum calcium/phosphorus ratio was within normal range. After 8–16 months of onset of hematuria, these camels died. Post mortem examination revealed 2-3 cm areas of calcification in the renal medulla. Histopathological examination revealed para-tubular calcification with haemorrhage as well as focal glomerulate- phritis. In the present study, precipitation of calcium within the renal parenchyma could be due to excess calcium salt in the concentrate ration of the camels. Camels absorb calcium and phosphorus in higher amounts than other ruminants. Analysis of the camel feed revealed an excess of calcium.