

بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكرو فيلم

قسم

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Cairo University

Cairo University
Faculty of Veterinary Medicine
Department of Medicine and Infectious Diseases



Diagnostic Studies on Some Urinary Tract Affections in Dogs

Thesis presented by

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(B.V.Sc. 2004, Faculty of Veterinary Medicine, Banha University)

(For the Master's degree in Internal Medicine)

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SUPERVISION SHEET

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Abstract

A total number of 109 dogs of different age ,sex and breeds were included in the present study; admitted to the clinic of the Faculty of Veterinary Medicine, Cairo University and other private clinics and exposed to complete clinical examination, hematology, serum biochemistry, , Ultrasonography ,radiography ,urinalysis ,urine culture and histopathological examination. Eight groups were the division of cases according to clinical case admitted to clinic, included all of urinary affections cases. First group (14dogs) used as apparently healthy dogs. In second group (42dogs) suffered from cystitis, third group (20dogs) suffered from nephritis..furth group(17dogs) suffered from renal failure fifth group (3dogs) suffered from Hydronephrosis. sixth group (4dogs) suffered from urinary bladder stones, and seventh group (3 dogs) suffered from prostatitis. In the last group (6dogs) was exposed to induced acute kidney injury using gentamicin injection. Gentamicin injection has nephrotoxic effect on renal tissue and consequently on renal function specifically with prolonged administration.

Physical examination reveal Significant increase in temperature, respiratory rate, and pulse rate in cases of cystic stones .Hematological examination showed Significant decrease in MCV,MCH and Significant increase in non-segmented neutrophils and monocytes (Nephritis), Significant decrease in Hb,MCH and segmented neutrophil(Hydronephrosis), Significant decrease in MCV,MCH ,MCHC,and Significant increase in TLC.(Renal failure) . Significant decrease in Hb,RBCs ,MCHC and segmented neutrophil , Significant increase in TLC.(cystitis), Significant decrease in Hb,RBCs ,PCV,AND Significant increase in TLC (cystic stones), Significant decrease in Hb,RBCs ,PCV,MCV(Prostatitis) .Serum biochemical profile showed Significant increase in urea, creatinine (nephritis, Hydronephrosis, renal failure and cystic stones), Significant increase in uric acid (renal failure).Urinalysis revealed Hematuria ,pyuria and proteinuria and glucose in urine (Renal affections). Urine culture revealed isolates of E-coli, Proteus and Staphylococcus. Ultrasonography revealed changes in echogenicity and change in kidney size, hyper echoic renal cortex (nephritis) , dilated renal pelvis (hydronephrosis). loss of architecture details ,the periphery is hyper-echoic, and the contour of the renal cortex and medulla is indistinct (renal failure).thickening in the wall of the bladder(cystitis), hyperechoic structure inside urinary bladder (cystic stone) the presence of anechoic or hypo echoic cavity, delimited by a thin wall with posterior reinforcement(prostatic cyst). Abdominal radiographyshowing radioopaque oval calculi in the urinary bladder (cystic stone).

In dogs exposed to experimental induced acute renal failure Hematological examination showed Significantdecrease in PCV, Significant increase in non segmentedneutrophils . Biochemical results revealed significant increase in urea and creatinine at day12. Urinalysis results indicated increase in leukocyte, albumin, glucose, and pus cells and RBCs. Urine culture revealed isolates of *E.Coli*, Proteus and staphylococcus bacteria. Ultrasonographic results showed increase echogenicity of renal cortex with loss of corticomedullary junction on day 9. on day12, intensive hyper echogenicity of renal cortex was detected. Histopathological examination of kidneys showed different degenerative changes, hemorrhage and nephritis, other organs revealed presence of degeneration, inflammation and hemorrhage.

Keywords: Dogs, Diagnostic Studies , Urinary, Tract, Affections

Dedication

I like to dedicate this work to my father (may the god have mercy on him and placed him into his havens), my dear mother, My Sisters, my husband, my lovely sons (Ahmed and Youssuf), dr. Mohammed sayed Mahmoud Kamel, and my friends Eman Ali, Mohammed Fouda for all the support they offered during my post- graduate studies and field work.

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