

CHRONIC/RECURRENT CYSTITIS IN THREE MALE DOGS PRESENTED TO THE VETERINARY TEACHING HOSPITAL (VTH)

S. J. WIJESINGHE, W.R.B. KUMARA, M.A.C.M. SARJOON,
D.D.N. DE SILVA AND I.D.SILVA

*Veterinary Teaching Hospital, Department of Veterinary Clinical Sciences,
Faculty of Veterinary Medicine and Animal Science, University of Peradeniya*

The objective of this communication is to present and discuss the treatment and management of three male dogs, A (11 month Bull Mastiff), B (7 year German Shepherd) and C (2 year Dobermann) with chronic/recurrent cystitis presented to the VTH from 2005 to 2006. Dog A showed haematuria (HU) at the end of urination, dysuria, stranguria (SU) and pollakiuria, B showed HU at end of urination, SU, rock hard distended bladder (DB) and pain on palpation (PP) and C showed HU, SU, DB, PP, hyperaemic glans penis and urinary incontinence. The clinical course ranged for 9 months in A, 4 years in B and 2 months in C. Dog A had been treated earlier with amoxicillin (AM), amoxicillin with clavulanic acid (A+C), nitrofurantoin (NI), cefuroxime (CE) and norfloxacin in a chain sequence for 5-21 days but haematuria recurred 3-10 days after each antibiotic dose. Dog B had been treated at 3 years of age twice (for 5-10 days) with AM and doxycycline; haematuria had subsided for 3½ years but recurred and had again been treated with AM, enrofloxacin and ciprofloxacin (CI) for 7-10 days periods. Dog C had been treated twice with AM and CI (5 days each) but subsequently recurred.

History and clinical examination narrowed the diagnosis to lower urinary tract infection, neoplasia, urolithiasis and lesions such as polyps or diverticuli. Prepubic cystocentesis of urine revealed haematuria, pyuria, epithelial cells, proteinuria, alkaline urine and/or crystalluria (struvite). Haematological and serum chemical parameters were normal in all dogs. Culture of urine revealed *Escherichia coli*, streptococci and/or proteus (>100000 colonies/ml). Urine of A had all three bacteriae which were sensitive for CE, gentamicin, ceftriaxone; proteus in B was sensitive to A+C and pathogenic *E. coli* in C was sensitive to NI. Plain and double contrast cystogram (using "urografin" and air) revealed thick walled bladder, irregular mucosal lining with adherence of contrast medium, indicating cystitis. Radio-opaque calculi in penile urethra of C were surgically removed.

Bladder diverticulum, polyps, neoplasia, calculi, pyelonephritis, hyperadrenocorticism, diabetes mellitus or idiopathic causes have been identified as predisposing factors for chronic/recurrent cystitis which can compromise the host defence mechanisms. Idiopathic factors in A and B and calculi in C were detected as the predisposing factors for chronic/recurrent cystitis. The treatment protocol for chronic cystitis was commenced with CE 500 mg q12h for A, A+C 15 mg/kg q12h for B and nitrofurantoin 4mg/kg q8h for C, together with Vitamin C (urine acidifier) 250mg-500mg/ animal q12h for all 3 dogs for 4-6 weeks. Urine culture revealed no bacterial growth at 10 days after the initial treatment and after the completion of the treatment course. The treatment continued with the preventive protocol (half the therapeutic dose, q24h at night after urination) for 3-6 months. Urinalysis and culture reports continued to give negative results 2 weeks after the preventive protocol and at 1-3 month intervals thereafter for 1-1.5 years, confirming that all 3 dogs were cured of cystitis. Hence, long term antibiotic therapy can be successfully used in treatment and management of chronic/ recurrent cystitis.