

HEMATOLOGICAL, BIOCHEMICAL AND URINALYSIS FOR THE DIAGNOSIS OF URINARY TRACT INFECTION IN GERMAN SHEPHERD DOG.

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ABSTRACT

The current study was conducted to evaluate the hematological and biochemical alteration in German shepherd dogs suffering from bacterial urinary tract infection in Diwanyia City Police Dogs division. The total number of examined cases was 7 cases and three bacterial isolates were detected from urine samples. Of the isolated strains 5 (71.42%) were identified as *E.coli*, 2 (28.57%) identified as mixed infection with *E.coli* and *Streptococcus* spp. Infected animals showed hematuria, fever, depression, abdominal pain, loss of appetite and restlessness. Physical examination of the infected urine showed turbidity and red coloration, furthermore chemical examination indicated the presence of RBCs (hematuria +4), bilirubin, Urobilinogen, leukocytes (+2), protein (+2), nitrate (+1) and the specific gravity is 1.030, glucose was negative in all cases. Crystals (amorphous), epithelial cells and casts of different types have been detected in the microscopic examination of the urine. Moreover results also indicated increase in creatinine and urea values, however there was a decrease in the concentration of K⁺ (potassium) in serum in case (No.5), mild increase in GGT values in the cases (No.5, 3 and 6) have been indicated. On the other hand triglyceride value showed increase in case (No.3) comparing with other cases. The results revealed that the Hb rates have been increased in case (No.5) compared to the other cases. The results revealed that the percentage of bacteriuria in the affected dogs was (57.14%).

INTRODUCTION

The German Shepherd Dog originated in the Alsatian Region of Germany. Today it is used worldwide as a sentry, police dog, tracker, drug dog, search and rescue dog, and guide dog for the blind people. The official name for this breed is German Shepherd Dog, though it is often called the German shepherd or just Shepherd. The German Shepherd Dog is unique because it has a very short colon in comparison to other breeds of the same body weight. The Weight Standards: male - 80 to 85 lbs., female - 65 to 70 lbs., Height Standards: male - 24 to 26 inches, female - 22 to 24 inches, and the Coat: dense, straight, short, tricolored (1). Urinary tract infections (commonly called "UTIs") are very common in dogs, especially in females; although they certainly occur in males as well. A urinary tract infection (UTI) is bacterial infection that affects part of the urinary tract. When it