HYPERPLASTIC PROSTATITIS IN A JACK RUSSELL TERRIER- A CASE REPORT

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ABSTRACT

Prostatic diseases usually occurs in male dogs above six years of age. The present report deals with hyperplastic prostatitis in a two year old Jack Russell terrier and its successful therapeutic management. Clinical signs encountered were anorexia, fever and constipation. Symmetrically enlarged prostate could be palpated on trans-rectal examination. Cytological examination of prostatic discharge revealed hyperplastic prostatic cells with inflammatory response. Ultrasonographic examination revealed normoechoic to hyperechoic symmetrically enlarged gland with a relatively smooth contour. The animal was treated with enrofloxacin @ 5 mg/kg body weight orally for 15 days which resulted in an uneventful recovery.

Key words: prostatitis, pollakiuria, prostate, tenesmus

INTRODUCTION

The canine prostate gland is a bilobed structure with a palpable median raphe, which completely surrounds the urethra just distal to the internal sphincter. Prostatic diseases usually occurs in male dogs above six years of age. Usually animals with prostatic diseases exhibit lower bowel signs like tenesmus, hematochezia and constipation in contrast to humans with prostatic diseases, where lower urinary tract signs like pollakiuria, dysuria and hematuria will be prominent. Some dogs with prostatic disease may exhibit a wide-based gait in the hind limbs, called the 'prostatic shuffle', which is an attempt to ease discomfort while walking. Hemorrhagic and purulent urethral discharge is a common sign of prostatic disease in dogs. In breeding dogs, prostatic diseases result in decreased libido (due to discomfort), hemospermia and reduced fertility.The present report deals with hyperplastic prostatitis in a Jack Russell terrier and its successful therapeutic management.

CASE HISTORY AND OBSERVATION

A two year old male Jack Russel terrier was presented to University Veterinary Hospital, Mannuthy with a history of anorexia, fever and constipation for about one month. The dog was treated previously in a local veterinary hospital before the referral. The temperature, pulse and respiration rates were 103^0F, 115/minute and. 28/ minute, respectively. The visible mucous membranes were congested. Haematological analysis revealed leukocytosis (14000/cu.mm) with neutrophilia (84%), and mild anaemia with haemoglobin of 10.8g%, RBC of 4.85million/ cu.mm and PCV of 30%. Serum biochemical analysis revealed mild hypoalbuminaemia, (2.3 g/dl) and hyperglobulinaemia (4.2g/dl). Serum creatinine and blood urea nitrogen were with in normal range. On trans-rectal examination, symmetrically enlarged prostate could be palpated and the animal exhibited pain on palpation of prostrate, which suggested prostatitis.

Prostatic fluid was collected by trans-rectal prostatic massage and the fluid obtained was subjected to cytological examination. Prostatic smears were prepared from the collected prostatic fluid and stained with Giemsa stain and observed under oil immersion objective of microscope. Microscopic examination of Giemsa stained prostatic smears revealed hyperplastic prostatic cells with large number of neutrophils (Fig.1). Catheterized urine sample was sterile upon culture and sensitivity. Ultrasonographic examination revealed normo echoic to hyperechoic symmetrically enlarged gland with a relatively smooth contour (Fig.2).

TREATMENT AND DISCUSSION

Based on clinical signs, trans-rectal examination, prostatic cytology and ultrasonography, the condition was diagnosed as hyperplastic prostatitis. The animal was treated with enrofloxacin @ 5 mg/kg body weight orally for 15 days which resulted in an uneventful recovery.

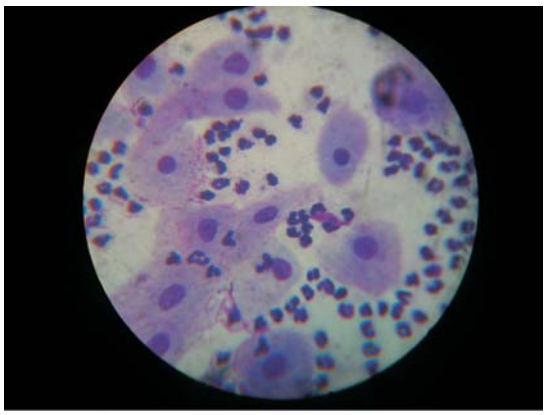

Fig.1. Hyperplastic prostatic cells with neutrophils indicating an inflammatory response

Fig.2. Ultrasonogram revealing normoechoic to hyperechoic symmetrically enlarged prostate gland.

Clinical signs such as straining to defaecate and constipation may result secondary to displacement and narrowing of large intestine due to prostatomegaly (Hoffer et al., 1977). Haematological analysis of animals with prostatitis revealed leukocytosis with neutrophilia (Smith, 2008). Barsanthi and Finco (1979) suggested that most of the prostatic infections were secondary to migration of bacteria from the urethra although spread through blood, semen and rectal flora was also possible. In this case, eventhough prostatic infection was there, urine sample was sterile,. This may be due to the fact that the animal has undergone previous antibiotic therapy with an antibiotic sensitive to urinary tract infection, but not having any action on prostate. In prostatic diseases, antibiotics which can diffuse through blood prostate barrier could be selected. Enrofloxacin could diffuse through blood prostate barrier and attain a therapeutic concentration in prostate gland (Duque et al.(2009).

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