

THERAPEUTIC MANAGEMENT OF UNILATERAL SCROTAL ABSCESS IN A RAM- A CASE REPORT

M.S.S.V.Phaneendra¹, M. Saibaba², R. Hanuman Saheb³ and P.Thejasree⁴

Department of Veterinary Surgery and Radiology,
College of Veterinary Science, Tirupati

Abstract

Unilateral scrotal abscess in a ram was treated successfully by adopting specific antimicrobial therapy based on the ABST (Anti Biotic Sensitivity Test) results and animal made a good recovery.

Key words: Unilateral, Scrotal abscess, Staphylococcus aureus, ABST, Ram.

Introduction

Abscess is a collection of pus that hollows out a cavity in the tissues by destroying and expanding them (Misk *et al.*, 2008). Scrotal abscesses are the most important genital abscesses in rams (Garcia 2006 and Smith 2008). Shearing injuries and penetrating wounds of scrotum may develop into abscess under unhygienic or warm and humid conditions may develop into abscess (Smith 2008 and Sargison 2009). Scrotal abscess results in permanent unsoundness but radical treatment may prevent involvement of deeper tissues (Sargison 2009).

Case history and Observations

A five year old ram maintained for breeding purpose was presented to the college hospital with scrotal enlargement, loss of appetite and reduced fertility. On clinical examination of the scrotum, the animal felt pain and discomfort and there was notable enlargement of the right hemiscrotum (Fig. 1) with the left hemiscrotum being normal. On aspiration of the scrotal contents using a syringe, the pus was notice and diagnosed to be a case of scrotal abscess.

Treatment

The scrotal region was prepared aseptically using povidone iodine and a nick incision was given at the dependent part of scrotum to drain out the purulent material completely (Fig. 2). The scrotal cavity was thoroughly irrigated with potassium permanganate solution and a povidone seton was placed. Advised alternate day dressing. The collected pus material was taken immediately to the college microbiology lab for culture study. The pus material was cultured in nutrient broth for 24 hours at 37⁰C, which later revealed gram positive cocci. For further isolation, they were streaked on blood agar, which produced complete hemolysis after 24 hours at 37⁰C and were also positive for catalase and coagulase confirmed *Staphylococcus aureus* infection. On ABST, highest sensitivity and zone of inhibition was noticed in case of ceftriaxone-tazobactam followed by enrofloxacin, oxytetracycline, amoxicillin-cloxacillin and tylosin. Based on the ABST result, Inj. Intacef-tazo (15mg/kg) and melonex (0.2mg/kg) were administered to the animal for 7days and 4days respectively.

Results and Discussion

Infection is the main cause of scrotal abscess (Sargison *et al.*, 2003). The microorganisms most commonly isolated were *Streptococcus* spp, *Staphylococcus* spp, *Arcanobacterium pyogenes* and *Actinobacillus seminis* (Garcia, 2006). Scrotal abscess due to specific pathogen, such as *Streptococcus faecium* (Barakat *et al.*, 1982) and *Staphylococcus capitis* (Lacasta *et al.*, 2009) were reported, which in present case was reported to be *Staphylococcus aureus*. In case of scrotal abscess, the treatment is directed towards removing the affected testis (Smith 2008), but in the present case, the condition regressed on specific antimicrobial therapy based on ABST results. *Staphylococcus aureus* isolated from variety of animal species, which was most commonly reported as a cause of mastitis in dairy-producing animals(cattle and goats), bumblefoot in chicken and pathogen of farmed rabbits (Smith 2015). Abscess should be differentiated from other swellings such as bursitis, cyst, haematoma and hernia by exploratory puncture (Abdel-Hady *et al.*, 2015) for prompt intervention to obtain better results. The animal made a good recovery due to timely intervention and specific antibacterial regimen.

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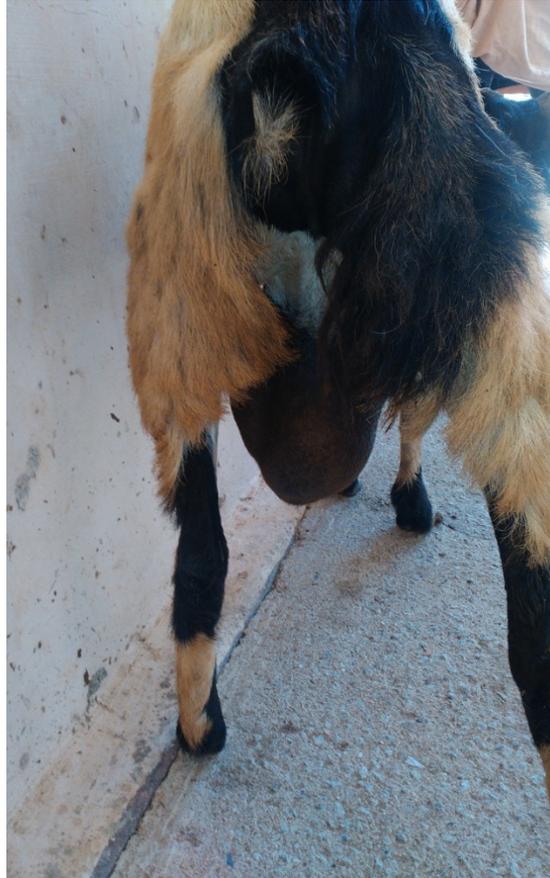


Fig.1 Enlarged right hemiscrotum



Fig.2 Drainage of abscess content