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# Scrotal pyocele in a bullock and its management: A report

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#### Abstract

A case of khillari bullock was presented to Veterinary hospital, Satti, Tq: Athani, Dist: Belagavi, Karnataka with a history of scrotal and testicular swelling since 2 months. On aspiration pus came out from the scrotum. Based on gross and clinical examinations the case was diagnosed as scrotal pyocele and was subjected to scrotal ablation. Surgery was performed under Xylazine sedation and local ring block infiltration around spermatic chord with 2% Lignocaine hydrochloride. Postoperatively, Streptopencillin @ 5g and Meloxicam @ 0.3mg/kg were administered intramuscularly for 5 days. Sutures were removed on 12<sup>th</sup> postoperative day. The conventional technique of making incision on ventral or ventrolateral aspect of the scrotum and regular dressing of wound cavity is tedious, time consuming. Such animals have to be rested for longer period and there is delayed secondary wound healing. However, the scrotal ablation technique was easy to perform with minimal bleeding. Operated animal recovered uneventfully without any complication.

Keywords: Pyocele, scirrhous cord and scrotal ablation

#### Introduction

Scrotal conditions like testicular tumour, varicocele, hydrocele, trauma, orchitis, torsion of spermatic cord, pyocele and scrotal hernia etc need surgeon's attention for the accurate treatment (Schumcher *et al.*, 1992). Scrotal pyocele is accumulation of pus in scrotum which may be due to orchitis, concurrent bacterial infection and faulty castration (Sagar *et al.*, 2010)<sup>[5]</sup>. This condition severely affects the reproduction in serving bulls and reduces the draughtability of working bullocks (Kamalakar *et al.*, 2015)<sup>[2]</sup>. Scrotal pyocele is the most common sequelae to improper technique followed in closed method of castration. Hydrocele may also due to trauma, ascites or strongyle larvae in spermatic artery. Either unilateral orchiectomy (Maxwell, 2005)<sup>[3]</sup> or scrotal ablation (Gupta and Khar, 2010)<sup>[1]</sup> can be performed depending upon the scrotal involvement.

#### **Materials and Methods**

An 8 year old khillari bullock was presented to Veterinary hospital, Satti, Tq: Athani, Dist: Belagavi, Karnataka with the history of hard swelling at right side of scrotum from past 25 days and also had a history of castration with closed method one month back. The case was treated by local quack without any improvement.

Clinical examination of bullock revealed severe hard swelling at left side of the scrotum including spermatic cord and abduction of hind limbs. An open septic wound was observed at its ventral most aspect which was filled with pus and on probing it extended up to neck of the scrotum. The case was diagnosed as scrotal pyocele.

Bullock was fasted for 18 hours and prepared for aseptic surgery. Sedation was done with intramuscular injection of xylazine hydrochloride @ 0.05mg/kg and restrained in lateral recumbency. After securing four legs together and the scrotum was pulled out for easy handling. Local analgesia was achieved with ring block by using 2% lignocaine hydrochloride. Surgical site cleaned and scrubbed with savlon. A circular incision given at the neck of scrotum. Spermatic cords were approached with careful blunt dissection and were ligated by transfixation with silk no-2 and were severed distal to the ligature. Capillary bleeding was arrested with digital pressure and whole scrotum removed with careful dissection. Whole surgical site was irrigated with povidone iodine. Streptopencillin powder was sprinkled on the site. Skin edges were sutured with nylon in horizontal mattress pattern and a tincture benzoin seal was applied. Post-operatively meloxicam @0.3mg/kg, chlorpheniramine maleate @0.2mg/kg and streptopencillin @5g were administered intramuscularly for 5 days.

Daily wound dressing was done with povidone iodine for seven days and sutures were removed on 12<sup>th</sup> post-operative day. Animal recovered normally without any complications.

### **Results and Discussion**

In above case, clinical observations were made on day 0, 3, 7 and 12 after the treatment for healing of surgical wound. No complications observed in all the days except on day 3 slight swelling observed on suture line. Sutures removed on  $12^{\text{th}}$ post-operative day. Pyocele is a consequence of orchitis infected by pyogenic bacteria, while scirrhous cord is a fibrous thickening of spermatic cord due to invasion by microbes (O' Conner, 2010). Similar findings were observed by Sagar *et al.* (2010) <sup>[5]</sup> and was treated by scrotal ablation which was also consequence of faulty technique of castration.



Restraining of animal in lateral recumbency



Circumscribed incision at the neck of scrotum



Skin edges sutured with simple interrupted pattern



Pus containing round mass separated



Presence of pus in the scrotum



Post-operative image of the animal

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