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Case Report

Hematoma in unilateral testis of goat in Kuwait

Khalifah Ali[1]*, Haithem Ali Mohamed Ahmed Farghali[2] and Ashraf Ali Eldesoky Shamaa[2]

[1]Public Authority for Agriculture Affairs and Fish Resources – Kuwait City, Kuwait
[2]Department of Surgery, Anesthesiology and Radiology, Faculty of Veterinary Medicine, Cairo University, Egypt

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***Corresponding Author**

Khalifah Ali
vet-1@live.com

ABSTRACT

A male goat of eight years old was suffering from scrotal swelling in right testicular for the past six months with the history of non-responsiveness to any medicinal treatments subjected to worsen the condition to incurable grade. Diagnosis was performed based case history, clinical examination, and ultrasound examination. After undergoing check, it was found that difficulty, walking, anorexia, stop insemination, sometime increase temperature and depression. The animal was prepared to perform surgical removal of the affected testis. The testis was successfully removed. The wegiht of the swelled testes was about 2 kg. Opening the testicle in the transverse form showed clotted blood, fibrous tisse and serological fluids from the testicle was appeared. After post operative care and managemen the buck come back to its normal life.

INTRODUCTION

The castration of male goats is a routine practice in many countries aimed at reducing management problems with aggressive and sexual behavior, as well as improving meat quality (Molony et al., 1995). Castration has been shown to elicit inflammatory reactions, physiological stress, suppression of immune function, pain-associated behavior, and a reduction in performance (Fisher et al., 1996).

The main techniques used to castrate goats include surgical or nonsurgical/ischemic (elastrator, burdizzo or emasculatome) methods (Dawson LJ. Preferred Management Practices 2010).

Since a technique was developed for implanting a catheter to collect the fluid flowing from the rete testis of conscious rams (Voglmayr & Setchell, 1966; Voglmayr et al., 1967), it has been possible to measure many features of the secretion of this fluid by the testis (Setchell et al., 1969).

In stallions, enlargement of the testis can be due to orchitis, vascular or lymphatic stasis within the testis, testicular haematoma, or testicular neoplasia (Turner 1998).

Orchitis, or inflammation of the testicular parenchyma, is a relatively uncommon lesion in domesticated animals, with the exception of brucellosis in ruminants in endemic areas (Foster et al., 1996)

Orchitis may be the result of infection extending from a wound, haematogenous spread of organisms, trauma, or extension of infection from the accessory sex glands (Kasaback et al., 1999).

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The affected testis is typically enlarged, hot, and painful. Systemic signs such as fever, leucocytosis and hyperfibrinogenaemia may also be present (Turner 1998).

The use of diagnostic ultrasound equipment is even more widespread in various sectors of veterinary practice, as it is a non-invasive and innocuous technique aiding diagnosis. In genital disorders, ultrasonography permits the diagnosis of several types of scrotal, testicular and epididymal lesions in rams (Ahmad et al. 1991).

MATERIALS AND METHODS

Collection of medicine and herbal products

Goats were sedated with 0.3 mg/kg dose Xylazine-HCl intravenously (Duncanson 2012). Goats were castrated by the Burdizzo (emasculatome) method. All castrations were performed by the same surgeon, who was experienced with the technique (Karademir et al., 2015).

Bilateral castration with scrotal ablation was performed for scrotal hernias. The rings of inguinal hernias of immature females and all those of scrotal hernias were closed with simple interrupted No.1 nylon, polypropylene or polyglycolic acid. The tissues overlying all the repaired rings, including the subcutaneous tissue, were sutured in a single or multiple layer (depending on the thickness of the abdominal wall at the surgical area) with simple continuous No1 polyglycolic acid or No.1 chromic catgut. Excess skin was removed, and skin wounds were closed using simple interrupted No.1 silk or polypropylene. Drains were placed in the lower parts of the repaired ventrolateral and inguinal hernias of adult animals to prevent seroma formation and accumulation of blood in the dead spaces. The owners were asked to remove the drains when no swelling is seen in the surgical area and no fluids or blood is coming out from the drains. Because most of these cases were brought from remote and rural areas, postoperative care (daily wound dressing, antibiotic injection and removal of skin stitches 10 days after the operation) was done in local veterinary hospitals. Postoperative complications and follow up information were obtained from the owners through phone calls.

RESULT AND DISCUSSION

The testis was successfully removed. The final shape of the inscission and the stitching was done in a continuous horizontal matteress.

The wegiht of the swelled testes was about 2 kg. Opening the testicle in the transverse form and serological fluids from the testicle was appeared.

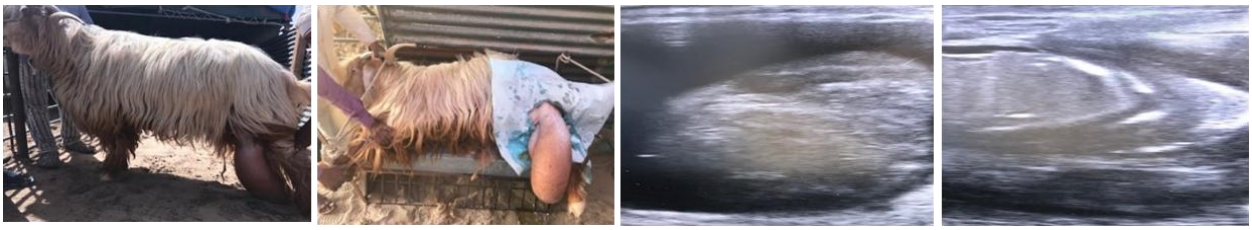

Figure 1. Eight year-old goat with enlarged left testicle (left sides 2 pictures).Testicular imaging via ultrasound the picture shows a suspicion of hematoma and serofluids deposition in the scrotum (fluid black colour) (right 2 pictures).

Figure 2: Anatomical longitudinal incision of the testicle and the appearance of the clotted blood (hematoma) and the testicle shows a fibrous tissue (let 3 pictures). Post operation after remove right testis (right picture).

Testicular trauma is the most common cause of testicular hematomas in the small ruminants. Small hematomas also may develop following testicular biopsy. Hematomas can form within the testicular parenchyma or on the surface of the testicle. Although small intratesticular hematomas may not result in noticeable scrotal enlargement, usually in the acute stages of hematoma formation the affected testis does become enlarged, warm, and painful. The diagnosis of testicular hematoma often was made ultrasonographically. As the hematoma organizes, its ultrasonographic appearance became more echogenic, eventually appearing hyperechoic relative to the surrounding testicle. Fibrin tags and adhesions may also form in the affected area.

Prognosis for future fertility of the affected testicle depends on the size of the hematoma and the degree of fibrous tissue formation. Small hematomas can be expected to cause only local changes in spermatogenesis, leaving the majority of the testicular parenchyma unaffected or only transiently affected by the temporary increase in temperature. Larger hematomas typically cause more severe effects on fertility. The degree of loss of testicular parenchyma will depend on the amount of pressure necrosis and fibrous tissue formation.

In cases of extremely large hematomas where bleeding is not contained, unilateral orchiectomy may be considered. However, this is rarely indicated. The case is a rare case and due to enlargment of the testis that causing problem with activities of the buck we have decised to remove the testis. The animal was got back to its normal life.

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