

ABNORMAL DROOPING OF TESTICLES IN BREEDING RAMS

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ABSTRACT

This paper deals with abnormal drooping of testicles in breeding rams, INTERFERENCES WITH NORMAL GAIT, reduced libido and Fleshmens response, their market value and possible remedial measures. Abnormal drooping of testicles was recorded in Kadapa and Macharla, in breeding rams. When one breeding ram was made to serve more than 60 ewes, their testicles were drooped down from 4 to 24 centimeter. This may be due to compression or hypertrophy or inertia of cremaster and dartos muscles, blood vessels and nerves passing through spermatic cord, or disturbances in testosterone production or infectious diseases. The infectious diseases were cured with antibiotics. The non infectious diseases were treated with homeopathic medicine Lycopodium CH 200. Severe drooped ones were emasculated. It is advised to use one breeding ram for 30 ewes to avoid abnormal drooping of testicles.

Key words: abnormal drooping of testicles, breeding disorders libido, Fleshmens response, gait disturbance, market value, lycopodium, emasculation.

No: of Figures: 2

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INTRODUCTION

Theriogenology is the area of veterinary medicine concerned with reproductive physiology, pathology, surgery, and medicine. Rams have very large testicles, which are situated vertically in the scrotum and dangle between the hind legs. The ram is the most important member of the flock, yet often the most neglected. Not only does he contribute half of the genetics to the flock, but also his success as a breeder will go a long way towards ensuring a profitable lamb crop. A ewe in heat (estrus) will generally seek out the ram. She will sniff and chase after him. The ram responds to urination by the estrus ewe by sniffing, extending the leg, and curling his lip. Curling the lip is called the "Fleshmen response." If the female is receptive, she will stand for mating. The ram may fail in several initial attempts to mount the ewe. He may repeatedly mate the same ewe. Rams will tend to select older ewes over younger ewes and sometimes will choose ewes of their own breed over ewes of another breed. Drooping of testicles is of 2 types. One is Normal and other one is Abnormal. The cause for normal drooping is of physiological origin, Stimuli due to heat, cold or fright. Once stimulus is removed, the testicles will be restored to the normal position. The normal drooping is transitory. The abnormal drooping of testicles is chronic in nature, may be restored or may become deformity. It can be classified as one restorable with almost regenerating activity. This can be manipulated through

chemotherapy and homeopathy and the other one non-restorable with no generating capacity. This can be managed by emasculation with Burdizzos' castrator. The cause of abnormal drooping may be due to infection, indiscriminate breeding, and inertia of generative organs of the ram. In the literature, Theriogenology of drooping testicles is very meager. Libido is a male's desire to mate. (Abebe 2000). This behavior is regulated by the release of testosterone, produced by specialized cells in the testes. Rams may exhibit a wide range of libido levels. Rams were classified as high libido if they achieved an average of 5~6 ejaculations within 30 min, whereas low libido when rams performed fewer than four (Price, 1987)

MATERIALS AND METHODS

Sixty breeding rams with hanging testicles, referred to Sreepathi veterinary Services Kadapa and to the veterinary hospital, Macharla of Guntur District, during 2014-2017 were included (Table:1) in the study. Rams were classified into two major groups as restorable ones as First group with almost regaining reproductive activity. They could be manipulated through chemotherapy and homeopathy. The Second group was non restorable one, with no regaining of reproductive activity. This group was operated by emasculation with Burdizzo's castrator. The restorable group was sub divided further into two sub groups as chemopathic and homeopathic

groups'. In chemopathic group mainly infected testicles (Orchitis) which may be unilateral or bilateral. Clinical findings of orchitis include a hot, swollen scrotum (usually unilateral); inability to move affected testicle freely in the scrotum; and pain on manipulation of the affected testicle and the scrotum. Some animals may show signs of systemic disease, pain on walking, and decrease in libido. The second sub group Homeopathy group .In this sub group, testicles were normal but abnormally drooping. The homeopathy remedy Lycopodium CH 200 was selected as the symptoms of lycopodium matched with those of drooped testicles. The prominent symptoms of affected rams with drooped testicles were senile, timid temperament, low libido, digestive disturbances, supremacy and quarrelling with younger lambs while serving , too much crossing with more number of ewes in oestrous, 10 to 15 per day. The rubrics of Lycopodium are senility, onanism, cowardice; fear of people, egotism, hepatic derangement and erectile dysfunction etc., (Boericke.O.E. 1927)Intacef Tazo 562.50mg (a brand product of Intas Pharmaceuticals Pvt., Ahmedabad) and Bioplex High Seven Bolus (a brand product of Alltech, Bangalore) were purchased.Lycopodium CH 200 Dilution was purchased from M/S

Rama Krishna Homeo Stores, Hyderabad. The homeopathy medicine was administered with dropper bottle over the tongue of suffering rams. Lycopodium CH 200 is an alcoholic extract of spores of Lycopodium Clavatum. (Choudhuri 1916)

The affected rams with no orchitis were only given Lycopodium CH 200, morning and evening for 3 to 5 days. The affected rams associated with orchitis were treated with Intacef Tazo562.50 strength,@5 ml per day for 3 to 5 day intramuscularly and Bioplex bolus @ ¼ was given orally for 8 days and then offered Lycopodium CH 200, in the morning and evening for 3 to 5 days. Badly neglected cases and cases not responded to homeopathy treatment, rams were finally emasculated.The healthy rams of same breed characteristics and age groups were identified and served as controls, from the flock where from affected rams were reported and acted as experimental group .In emasculation group 2,the affected rams were castrated with Burdizzo" castrator. Generally, in usual practice only one crushing on spermatic cord is made on right and left side. But in the affected group, for effective results, depending on the (length of the cord, 2 to 3 crushing's were made on both the sides with the castrator

Figure: 1
Drooping testicles with orchitis.

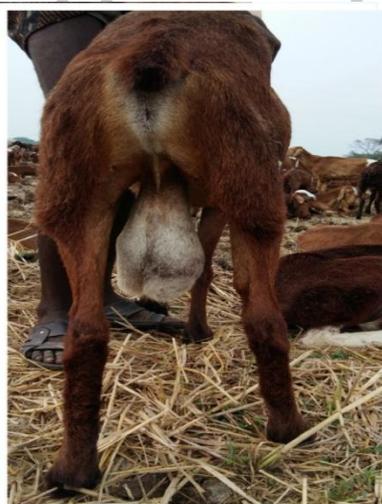
Before Treatment



After treatment

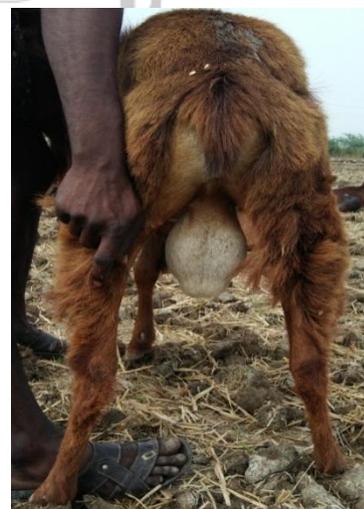


Figure: 2(HOMEOPATHIC GROUP)



Drooped testicles

Before treatment



Normal testicles

After treatment Nellore Brown

Results and Observation

Drooping of testicles were recorded in all breeds of sheep like Nellore, Macharla, Kenguri and Coridale

Table: 1

Sl. No.	Institution	HOMEOPATHIC GROUP			EMASCULATION GROUP		
		Number of rams Brought	Number of rams cured	Remarks	Number of rams brought	Number of rams emasculated	Remarks
1	Veterinary Hospital Macharla	8	6	2 beneficiaries were not available to give feed back	Nil	Nil	
2	Sreepathi Veterinary services, Kadapa	36	30	6 were not available to give feed back	16	12	4 were not reported

Table: 2 (General Response)

Sl.No	Parameters	Normal group	Homeopathic group	Emasculatation group
01	Libido index	High	Low to high	Absent
02	Testicular dimensions height (cm)	16	16	Nil
03	Market value (Rs)	6000	4000	5000
04	Weight of the animal (Kg)	50	40	35

Table: 3 (Fleshmen response after treatment)

Normal group	Homeopathic group	Chemopathic group	Emasculatation group
Very good	Good to very good	Fair to good	Absent

Symptoms noticed were, too much dangling of testicles, hitting inner side of stifle joints interfering the gait. The affected ram lag behind the flock. There was reduction of body weight from 6 to 3 kgs. There was no change in the height, girth and consistency of the testicles. The spermatic cord was elongated and stretched to 10 to 24 centimeter. (Mickelsen Et al., 1981) The affected rams positively responded to Lycopodium. They regained their libido and their market value bounced back to normal price.

DISCUSSION

The probable cause of drooping of testicles may be due to transitory inertia of external cremaster muscle, ductes deference muscles, nerves and blood vessels, present in scrotum and spermatic cord and disturbances in testosterone production. When a single ram is employed, in one season, to cover more than 60 ewes, This causes mush stress and abuse on part of ram when mounting and serving the spermatic cord and their contents touches the pelvic brim and causes pressure atrophy. As result of constant pressure cremaster muscle, losing its retention and retrieving capacity of testicles, and results in elongation of spermatic cord length wise touching almost to the level of stifle joint. Once lycopodium C H 200 was given, the external cremaster muscle got re-activated and the drooped testicles and spermatic cord were almost restored to normal position, in order to make them comfortable and regain their libido and serve the ewes. This phenomenon may due

to enhanced production of testosterone and priming of the activity of external cremaster muscle. Lakshmanan and Prakash (2016) administered different potencies lycopodium, daily for 60 days, in aged male Westar albino rats and found increase in testosterone levels and a better spermatogenic status, and mating behavior. But neglected and chronic cases may not respond to homeopathy or allopathy. The best alternative is emasculation. Cured rams with antibiotics should not be used for breeding to avoid Brucella or mycoplasma infection. In order to avoid abnormal drooping of testicles it is recommended to keep one breeding ram

for 30 ewes and if the flock size is more than 30 keep 2 rams of the same age group, lest the senior ram will not allow the junior ram to serve the ewe. If you're selecting the breeding ram, select the breeding ram in milk teeth in area 50KM away from your place to have healthy and good progeny.

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REFERENCES

Abebe.G 2000 Reproduction in Sheep and Goats, in Sheep and Goat Production Handbook for Ethiopia, Chap 5, Page: 60-79.

Boericke.O.E. 1927, *Materia Medica with repertory*, Jain publishers, New Delhi. Page: 409-413/2016.

Choudhuri, N.M 1916 *A study of Materia Medica and repertory*, Jain publishers, New Delhi. Page No: 426-434

Heath A.M. and, Purohit R.C., 1998, *Anatomy of the scrotum, testes, epididymis, and spermatic cord (bulls, rams, and bucks)*. In Wolfe D.F., Moll H.D., Editors: *Large animal urogenital surgery*, ed 2, Baltimore: Williams & Wilkins.

Lakshmanan G, and Prakash S. 2016 Effect of Ultra-High Dilutions of *Lycopodium Clavatum* on Reproductive and Sexual Functions in aged male Westar Albino Rats, *Homeopathy*, , 105, 1

Price EO. 1987. Male sexual behavior. *Veterinary Clinics of North America Food Animal Practice* 3: 405-422.

Mickelsen WD , Paisley LG, and Dahmen JJ 1981 The effect of scrotal circumference, sperm motility and morphology in the ram on conception rates and lambing percentage in the ewe. *Theriogenology*, 16(1):45-51]