

*Case Report***Surgical Management of Aural Haematoma Resultant of Tick Infestation in a Non-descript Sheep – A Case Report****Thara Singh D. Lamani, G. Kamalakar, C. L. Sunil, K. M. Srinivasa Murthy and B. N. Nagaraja**

Department of Veterinary Surgery and Radiology, Veterinary College, Hebbal– 560024, Bangalore, INDIA

***Corresponding author:** drkamal1vet@gmail.com

| | |
|---------------------|---|
| Rec. Date: | Sep 17, 2019 16:49 |
| Accept Date: | Nov 06, 2019 17:43 |
| DOI | 10.5455/ijlr.20190917044914 |

Abstract

An adult non-descript sheep was brought to the clinic with complaint of swollen right ear pinna since 10 days. On physical examination, soft fluctuating swelling covering entire medial aspect of right ear was noticed. Few ticks were found over body and ears. It was diagnosed as aural haematoma upon needle aspiration and was surgically drained out by a linear incision under xylazine sedation and auriculo-palpebral nerve block. Parallel to the line of incision, series of through and through interrupted horizontal mattress sutures were placed and protective overhead pressure bandage applied. Sutures were removed after 15 days and the animal showed uneventful recovery.

Key words: Aural Haematoma, Auriculo-Palpebral Nerve Block, Sheep, Surgical Drainage**How to cite:** Lamani, T., Kamalakar, G., Sunil, C. L., Srinivasa Murthy, K. M., & Nagaraja, B. N. (2019). Surgical Management of Aural Haematoma Resultant of Tick Infestation in a Non-descript Sheep – A Case Report. International Journal of Livestock Research, 9(12), 224-227. doi: 10.5455/ijlr.20190917044914**Introduction**

Reports of aural haematoma were most common in dogs, cats and pigs, but very rare and meagerly reported in sheep (Morgan, 1992; Tsioli *et al.*, 2013). Aural haematoma is characterized by soft swelling on medial aspect of external ear due to collection of blood between aural concha and skin (Gyorffy and Szijarto, 2014). Various etiological factors leading to aural haematoma include rubbing of ear due to external ear infections, hypersensitivity reactions, tick infestation, mange infection, foreign bodies in ears, otorrhoea and allergic dermatitis which leads to rupture of the delicate blood vessels over external ear pinna (Ahiwar *et al.*, 2007). The signs include head shaking, uneasiness, and turning of head to the affected site. Depending on the size of the swelling, various treatment modalities have been formulated. However, the aim of treatment is to drain haematoma fluid, remove fibrin debris, to promote inflammation, to eliminate the dead space of the haematoma

and to inhibit the recurrence. The present case report deals with a successful surgical management of extensive aural hematoma in a non-descript ewe.

Case History and Observation

A 5-year-old non-descript ewe was presented to the Department of Surgery and Radiology, Veterinary College, Bangalore with complaint of swollen right ear flap in the past 10 days (Fig. 1).



Fig 1: Photograph showing swollen and droopy ear

History revealed that sheep was treated for tick infestation and few ticks still observed over body and in the ears. On physical examination soft fluctuating swelling was noticed on medial side of right ear pinna. Few ticks were also found over body and in both ears. Aspiration of the swelling confirmed as aural haematoma and decided for surgical drainage.

Treatment and Discussion

The ewe was sedated with Xylazine @ 0.01 mg/kg BW I/M. Animal was placed on lateral recumbency with affected ear facing upwards and surgical site prepared aseptically. The area was desensitized by auriculo-palpebral nerve block using 2 ml of Lignocaine 2% injection. A linear full-length incision was made over the skin on concave side of pinna and serosanguineous fluid was drained out completely (Fig. 2). Fibrin deposits lining the cavity were scraped out carefully. The cavity was thoroughly smeared with tincture iodine to promote inflammation. A 0.5 cm linear piece of skin flap from the edges of the incision was removed in order to create a gap between the skin edges.



Fig. 2: Photograph showing drainage of serosanguinous fluid. Note fibrosis inside the cavity.

Series of through and through interrupted sutures were placed on both sides of the incision using polyamide no. 1 (Sutures India Pvt Ltd.) (Fig. 3) to obliterate the cavity. The wound was dressed and a tight protective overhead pressure bandage was applied. Postoperatively, it was administered with inj. ceftriaxone @ 20 mg/kg I/M for 5 days, inj. meloxicam @ 0.3 mg/kg BW I/M) for 3 days and two doses of inj. Ivermectin @ 200 µg/kg BW once in a week for two weeks along with alternative day wound dressing. Sutures were removed after 15 days and no recurrence was observed in 3 months post-surgery period.



Fig. 3: Photograph showing mattress sutures applied to affected ear

Aural haematoma is an important and prevalent surgical condition of ears in animals. It was reported very commonly in dogs (Tharasingh *et al.*, 2019), cats (Chethana *et al.*, 2016) sometimes in goats (Dewangan *et al.*, 2016) and rarely in sheep (Morgan, 1992). Blood accumulates on the concave surface of ear pinna may occur due to trauma to pinna, a history of acute or chronic otitis, violent head shaking, fly bites, external ear

mites and skin diseases (Dewangan *et al.*, 2016). In the present case it was due to the tick infestation. Various other reasons like psoroptic mange (Bates, 1996) pain and irritation caused by ear tagging in goats (Clayton, 2009) were also reported. Soft palpable swelling, drooping of ear and tilting of ear to affected side were also reported by Clayton (2009) and Tsioli *et al.* (2013). Needle aspiration or tube drainage was found effective for acute cases where as incision method for chronic cases of aural haematomas (Slatter, 2003). Tube drainage with teat cannula (Wilson, 1983) and Penrose drain (Joyce, 1994) can also be used for draining acute aural haematomas. An orderly placed through and through sutures obliterate dead space and prevent reaccumulating haematoma fluid. Incisional drainage technique followed by pressure bandage application was adopted in the present case and animal showed uneventful recovery.

Conclusion

Reports of aural haematoma in sheep were rare. Unilateral extensive aural haematoma in a non – descript sheep was surgically managed by full length linear incision, followed by through and through sutures and overhead pressure bandage was reported.

References

1. Ahiwar, V., Chandrapuria, V. P., Bhargava, M. K., Srivastava, O. P., Shai, A. and Jawre, S. (2007). A Study on Etiology and Occurrence of Canine Aural Hematoma. *Indian Journal of Veterinary Surgery*, 28 (2), 137 – 138.
2. Bates, P. G. (1996). Epidemiology of subclinical ovine psoroptic otoacariasis in Great Britain. *Veterinary Record*. 138, 388.
3. Chethana, D. H., Shwetha, K. S., Murthy, N. and Shashwath, B. S. (2016). Aural haematoma and its surgical management in non-descript cat. *International Journal of Applied, Pure Science and Agriculture*, 2 (7), 1 – 3.
4. Clayton, S. N. (2009). Goay Veterinary Society. The Farmers Weekly, pp: 36.
5. Dewangan, R., Sharda, R. and Kalim, M. O. (2016). Surgical management of extensive aural haematoma in a jamunapari goat. *International Journal of Science, Environment and Technology*, 5(4), 2221 – 2225.
6. Gyórfy, A. and Szijártó, A. (2014). A new operative technique for aural haematoma in dogs: A retrospective clinical study. *Acta Veterinaria Hungarica*, 62 (3), 340–347.
7. Joyce, J. A. (1994). Treatment of canine aural haematoma using an indwelling drain and corticosteroids. *Journal of Small Animal Practice*, 35, 341 – 344.
8. Morgan, K. L. (1992). Parasitic otitis in sheep associated with psoroptes infestation: a clinical and epidemiological study. *Veterinary Record*, 130, 530–532.
9. Slatter, D. (2003). Ear. In: Textbook of small animal surgery. 3rd edition, Saunders, Philadelphia, USA, pp: 1737 – 1741.
10. Tharasingh, D. L., Suresh, L., Kamalakar, G., Saigunaranjan, K. and Nagaraja, B. N. (2019). Surgical management of aural haematoma in dogs – A report of three cases. *International Journal of Agricultural Sciences and Veterinary Medicine*, 7 (1), 25 – 27.
11. Wilson, J. W. (1983). Treatment of auricular haematoma using a teat tube. *Journal of American Veterinary Medical Association*, 182, 1081 – 1083.