

Surgical Removal of Foreign Body from Bullock's Eye

Mahesh Lakde¹, M.V. Kamble² and V. Satpute³

Veterinary Dispensary
Animal Husbandry Department
Hirapur, Tq. Georai
Dist. Beed - 431122 (Maharashtra)

Abstract

A bullock was presented with complaint of lacrimation since five days, completely closed eye and some foreign object was recorded. On the basis of history and clinical signs, the case was diagnosed as ophthalmic foreign body. With taking all aseptic precautions under local infiltration and supraorbital and auriculopalpebral nerve block, the thorny foreign body was removed. Animal recovered uneventfully.

Keywords: Bullock; foreign body; lignocaine hydrochloride; nerve block

Introduction

Eye trauma is a preventable cause of ocular injury in animals and is one of the leading causes of ocular morbidity (Jan *et al.*, 2004). Superficial ocular surface foreign body injury is the most common form of ocular trauma. It causes significant discomfort. Eye is very sensible organ and if not properly diagnosed or treated can lead to permanent visual impairment. A patient may encounter this type of injury in a variety of incidences for example during grazing, pot feeding and in shade it results to accident. In most cases, ocular surface foreign bodies are small in size like insects, particles of iron, dust, insect wings, straw of vegetable matter, animal or human hair and threads of cotton or plastic which may cause severe injury to eye leading to pain, lacrimation and foreign body sensation. In most cases, ocular surface foreign bodies are found on cornea and palpebral conjunctival surfaces. Thorough eye examination including upper lid eversion is necessary in patients with history of foreign body. Identification of type of foreign bodies and their location of impaction into the eye will help in creating awareness and use of appropriate eye protective devices. According to Samad *et al.* (2002) the occurrence of eye injuries and foreign body is more in summer season. Most clinicians elected the use of auriculopalpebral nerve block for sensory and motor blockage of the orbit and surrounding tissues (Pearce, 2003; Schulz and Anderson, 2010). In this communication, use of

supraorbital and auriculopalpebral nerve block to remove the thorny foreign body with uneventful recovery of eye is described.

History and Diagnosis

A seven year old bullock was presented with complaint of lacrimation since five days, completely closed eye and some object was seen. The case was treated by Para-vet staff. On clinical examination, eye was completely closed and profuse discharge was found (Fig. 1). The eyes were cleaned with normal saline solution and surgery under an aseptic standard surgical procedure was planned.

Treatment

Before surgery, animal was fasted for twelve hours and water withdrawn for six hours to avoid complication like bloat. Taking all aseptic precautions, the animal was controlled in lateral recumbency and affected eye was upper side. The site was cleaned and shaved. The anesthesia was achieved by Supraorbital and Auriculopalpebral nerve block using 2% Lignocaine solution. After 10 minutes in sterile condition, the eye was opened with eye speculum and gave nick incision over the affected site and removed the foreign body (Fig. 2 and 3). Suturing was undertaken with 1-0 chromic catgut using simple interrupted suture in conjunctiva. Tarsorrhaphy was done to avoid further complications and infection.

The post-operative care was taken by giving Inj. Intamox^a (Amoxicillin and Cloxacillin) 2 gm intramuscularly for five days, along with Inj. Meloxicam (Melonex^a) 10 ml and Inj. Tribivet^a (B-complex) 10 ml intramuscularly daily for five days. Daily cleaning and dressing of wound was done with Povidone ointment. The eye ointment applied for five days. The tarsorrhaphy sutures were removed

1. Livestock Development Officer and Corresponding author. E-mail: lakde875@gmail.com
 2. Assistant Professor, Department of Veterinary Surgery and Radiology, Nagpur Veterinary College, Nagpur
 3. Livestock Development Officer, Veterinary Dispensary Grade I, Mokbhangi, Tq. Kalwan, Dist. Nashik
- a - Brand of Intas Animal Health, Ahmedabad

Foreign body from bullock's eye

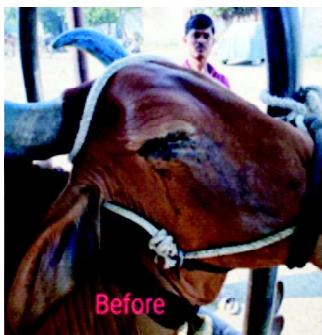


Fig. 1: Lacrimation and complete eye closure



Fig. 2: Foreign body in eye



Fig. 3: Removal of thorny foreign body



Fig. 4: Complete eye recovery

after the twelfth day of post-operative treatment with normal eye vision (Fig. 4).

Discussions

Although animals with many ophthalmic diseases may continue to eat and produce milk reasonably well, but they usually tend to lose weight (Rahman *et al.*, 2012). Most common aetiology of ocular surface injury was metallic particle and most common location was cornea (Bahoo and Jamil, 2018). In cattle, the course of therapy for severe ocular pathology is dictated not only by the disease entity present but also by the intended purpose and value of the animals well as the cost, frequency and efficacy of the chosen treatment (Ali *et al.*, 2015). In many cases which is not treated and causes secondary infection and loss of vision, enucleation involves the removal of the globe with the removal of para-orbital structures as dictated by the specific

disease process (Irby, 2004). The conclusion of the successful management of removal of foreign body recommends that early diagnosis and treatment saves eye and vision of eye in productive animals.

References

- Ali, M.M., Sadan, M.A. and Ibrahim, A. (2015). Ocular Field Surgery in Ruminants. *International Journal of Veterinary Medicine - Research & Reports* 2015: 1-8.
- Bahoo, M.L.A. and Jamil, A.Z. (2018). Types of ocular surface foreign bodies and their correlation with location in the eye. *Pak J. Ophthalmol.* 34: 25-29.
- Irby, N.L. (2004). Surgical Diseases of the Eye in Farm Animals. In: *Farm Animal Surgery*, Saunders, St. Louis, USA, p. 429-59.
- Jan, S., Khan, S. and Khan, M.T. (2004). Ocular emergencies. *J. Coll. Physicians Surg. Pak.* 14: 333-36.
- Pearce, S.G., Kerr, C.L. and Boure, L.P. (2003). Comparison of the retrobulbar and Peterson nerve block techniques *via* magnetic resonance imaging in bovine Cadavers. *J. Am. Vet. Med. Assoc.* 223: 852-55.
- Rahman, M.A., Islam, M.A., Talukder, A.K., Parvin, M.S. and Islam, M.T. (2012). Clinical diseases of ruminants recorded at the Patuakhali Science and Technology University Veterinary Clinic. *Bang. J. Vet. Med.* 10: 63-73.
- Samad, M.A., Islam, M.A. and Hossain, A. (2002). Patterns of occurrence of calf diseases in the district of Mymensingh in Bangladesh. *Bangladesh Vet. J.* 36: 01-05.
- Schulz, K.L. and Anderson, D.E. (2010). Bovine enucleation - A retrospective study of 53 cases (1998-2006). *Can Vet J.* 51: 611-14.

Received on: 28.03.2021
Accepted on: 30.04.2021