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Surgico-therapeutic Management of various trauma in equines: Studies of five cases

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Abstract

Four horses and one donkey were presented with history of trauma on various body parts. All the animals were treated surgically under general anaesthesia. All the animals were recovered well without any complications except stitches dehiscence in three-year-old mare.

Keywords: equines, trauma, surgical management

Introduction

The horses are domesticated by human as early as 30,000 BCE. The wild horses were hunted for meat purpose and later on utilized for transportation. Now a days horses are utilized for hobbies of riding, racing, as a transport mean in defence and police, breeding and as a symbols of social status in the societies. These horses are prone to various types of traumatic injuries, most commonly caused by wire fencing, sharp nails and road automobile accidents. These Injuries in equines leads to orthopaedic injuries and shock lead to death. Thus these needs immediate veterinary attention to save life. This paper presents a study of four traumatized horses and its successful surgico-therapeutic management.

Case History and Clinical Examination

Four equines comprised of a male foal and three mares age ranging from one month to twenty three years; and three year old male donkey were presented at Veterinary Clinical Complex, College of Veterinary Science and Animal Husbandry, Kamdhenu University, Anand with the history of deep trauma on different body parts. The foal was having deep incised wound on lower lip (Fig 1) which extended upto inner oral mucosa on left side caused by wire fencing. The twenty three year old mare and a donkey were presented with history of automobile trauma, the detailed anamnesis revealed, severely injured due lodgement of left hind limb in the floor of running transport vehicle in a mare (Fig 2) with profuse bleeding (Fig 3); and trauma by sharp object in donkey. In both the animals there were severe bleeding along with tear in skin, underlying tissue and muscles. Due to severe bleeding immediate attention was made and tourniquet was applied at the place of accident in mare. After presentation at VCC, clinical examinations revealed increased heart and respiration rates. There was no fracture of bones and deep damage to soft tissues.

Two three-year-old mares were presented with deep incised wound on planter region of left forelimb (Fig 4) along with extensive oblique skin tear on left hind limb caused by wire fencing and in other mare deep wound with separation of muscles fibres on posterior thigh by other animal on left hind limb. Clinical examinations revealed all horses were having profuse bleeding, but all were active and alert. The physiological parameters were within normal limits. On the bases of history of trauma and clinical examinations immediate surgical management was planned.

Treatment and Discussion

Pre-operative fasting was advised in three horses while in a mare and donkey due to severe bleeding immediate surgical management was done. In all animals general anaesthesia was achieved and maintained by using Inj. Ketamine HCL @ 2.2 mg/kg BW and Inj. Midazolam @ 0.1 mg/kg BW along with Inj. RL 1 litre in foal, donkey and 5 litres in other mares, Inj. Ceftriaxone @5mg/kg and Inj. Ketoprofen @ 2.2 mg/kg intravenously. In the foal the mucosal suturing was done by continuous suture pattern using polyglactin-910 No. 2-0 and skin was

sutured by ethicon 2-0 (Fig 5), while in other three cases after freshening of the edges (Auer and Stick, 2006), the underlying muscles were sutured by interrupted suture pattern using polyglactin-910 No 1 and skin suture was done by silk No. 2 by interrupted suture pattern followed by bandages for protection (Fig 6).

Post-operatively all equines were treated with antibiotic and anti-inflammatory intravenous medications along with topical antiseptic dressing with liquid betadine and pressure bandage till healing. In one mare there was stitches dehiscence was noted due to kicking habit of animal and proud flesh was also seen after five days while in remaining cases the animals were recovered uneventfully within fifteen days.

The wire fencing injuries and automobile accidental trauma are commonly encountered in animals due to behaviour of animals. These injuries can be occurred anywhere over the body or deeply in abdomen may lead to death of animals, or the injuries with involvement of bony structures in horses can be a cause of euthanasia but the injuries on face region and limbs without involvement of bony structure could be treated and life of animal can be extended. The soft tissues of the oral cavity are susceptible to traumatic injuries by sharp external objects. Injuries were less severe when horses were confined to a trailer compared to being free. The horse reacts to danger with a fight-or-flight instinct, resulting in large impact forces and predisposing to more severe injuries. It was interesting that when horses were confined in a trailer, lesions were predominantly located on the proximal fore - and hind limbs (Schwenk *et al.*, 2016) ^[1].



Fig 3: Profuse bleeding



Fig 4: Incised wound on planter region



Fig 1: Deep trauma on lower lip



Fig 5: Foal immediate after treatment



Fig 2: Lodgement of left hind limb in vehicle

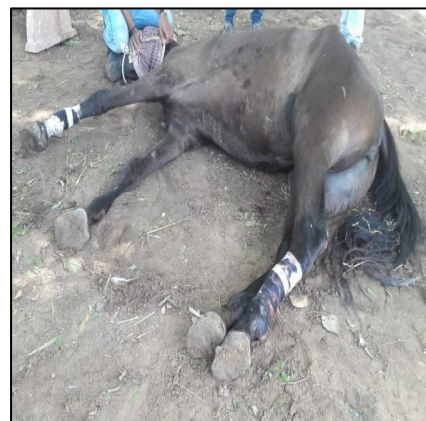


Fig 6: Mare immediate after treatment

References

1. Schwenk BK, Fürst AE, Bischofberger AS. Traffic accident-related injuries in horses. *Pferdeheilkunde* 2016; 32(3):192-199.
2. Gerard MP. Managing oral trauma and foreign bodies (Proceedings) 2010. <https://www.dvm360.com/view/dechra-acquires-veterinary-marketing-and-distributions-rights-for-equine-provet-apc>
3. Auer JA, Stick JA. *Equine surgery*. 3rd edition. USA: Elsevier Health Sciences 2006, 288-298.