

# WOUNDS AND LACERATIONS IN RACEHORSES

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**NO MATTER HOW SAFE THE STABLE OR HOW WELL MANAGED THE HORSE IS, HORSES WILL INJURE THEMSELVES AND THESE WOUNDS AND LACERATIONS CAN OCCUR WITHOUT WARNING.**

**T**hese injuries vary from unseen paddock accidents; observed accidents with equipment such as floats, walkers and treadmills; and racing accidents, including falls and overreach. The most significant factors in determining a treatment plan and prognosis are the following:

1. Time before treatment/diagnosis
2. Severity of trauma
3. Location and structures involved
4. Treatment plan elected

The type and cause of injury result in significant variation of these factors requiring each case to be managed individually. Early first aid is essential and should be performed prior to the veterinarian's arrival.

The person attending the horse prior to the veterinarian's arrival should be comfortable in basic bandaging and keeping the horse calm. When examining lower limb wounds, all will benefit from bandaging regardless of the age of the wound. Early compression of severe lacerations will significantly reduce oedema and swelling, increasing the chance of a successful repair. Traumatic overreach injuries may benefit from early application of cold hosing, bandaging, and anti-inflammatories. Anti-inflammatories can be administered orally prior to veterinary assessment however these should always be discussed with your veterinarian before administration.

Laceration of large blood vessels may result in profuse haemorrhage, which may require double bandaging or surgery to control. Deep wounds involving bones and ligaments should be carefully assessed and guided by the veterinarian as for the appropriate support required. Wounds on the neck and body are difficult to bandage, these often have larger soft tissue disruption, but usually require minimal bandaging.

Recent evidence suggests topical ointments and sprays should not be applied, unless directed by the veterinarian. Wounds of the head should be carefully assessed to

determine if any neurological impairment is evident and the horse kept calm.

The first assessment the veterinarian will make will always be to evaluate the overall health of the horse.

Severe blood loss can occur, leading to horses being unstable for sedation, transport, or surgery. If the horse is stable for examination, then the location of the wound is assessed. Location is the most critical factor in determining the soft tissue structure (muscle, tendons, ligaments), bones, and joints that may have been affected by the injury. Unless wounds are superficial, radiographs are indicated as a baseline for assessment of an injury to bone, determination of gas within soft tissue, and identifying the presence of a foreign body.

Once safe to evaluate, the wound will routinely be clipped and cleaned. Joint involvement may be determined by probing the wound, however evaluation of joint fluid and using sterile distension of the joint remain the only definitive way to determine joint involvement. Damage to tendons and ligaments may require the assistance of ultrasound to confirm or exclude injury.

Once an evaluation of the wound is completed then the veterinarian will

determine if repair in the field is indicated or referral to a hospital is required.

Many wounds are ideal candidates for standing repair in the field with local anaesthetic, however some benefit greatly from surgical repair under general anaesthesia. Standing repair reduces risk of a general anaesthetic, reduces cost, and avoids transport away from the farm or stable. General anaesthesia allows for more precise surgical repair and cleaning, prevents movement, and facilitates further diagnostics of soft tissues, bones, and joints to be performed.

If a laceration involves tendons and ligaments, they are rarely directly repaired, but allowed to heal with scar tissue. Many wounds of the limbs, particularly those involving the extensor tendons will benefit from the placement of a fibreglass cast. Casts can be placed on the foot, distal limb, or full limb reducing the movement and allowing wounds to heal rapidly. Injuries that expose the bone of the lower limbs, in particular with younger horses, have a greater chance of developing a sequestrum, which may complicate short to medium term recovery.

The prognosis for survival and returning to athletic performance varies greatly. In a large study examining wounds to the extensor tendon, prognosis for soundness was excellent (80-90 per cent). However, another report looking at only racing performance, showed an approximately 50 per cent return to racing for these horses. Wounds to the flexor tendons carry a grave prognosis for athletic soundness, however these can be managed for pasture soundness. Lacerations to joints and tendon sheaths are always a life-threatening emergency. If seen and treated surgically within 24 hours, these can carry a good prognosis for return to soundness.

Overall, there is a great variance on the prognosis of wounds and lacerations with location and severity of trauma the most influencing factors for returning to soundness. ▣

