

# Park Veterinary Centre

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## First Aid & Wound Management

### Types of wounds

- Graze/Abrasion
- Puncture wound
- Incised wound
- Laceration
- Burns
- Bruising/haematoma

It is very important to us to have some information about the injury before we attend your horse, so here are some tips on how to assess the situation and deal with it correctly before the vet comes:

- DO NOT PANIC
- Is the horse in a safe place?
- Is the wound bleeding profusely?
- Where is the wound and which structures are potentially involved?
- Can the horse be moved to a stable (Is the horse lame?)
- How old is the wound? (When wasn't the wound present?)

### Horse trapped in wire/fencing

- Try and keep horse calm (Feed if standing)
- Sit on neck (away from legs) to keep down if on the floor
- Cut fencing to free horse ASAP

### Leave embedded foreign body (except foot)

### Bleeding

- Is the blood jetting from wound (arterial bleeding)?

Apply tourniquet (towel, jumper, shirt) ABOVE the wound and /or dressing over the wound.

Ice might help if available

- Venous bleeding is slower and darker in colour. Apply direct pressure on wound.

Do not hose

### **Where is the wound?**

- Proximity to joints / tendons (beware of puncture wounds!)
- Penetrating wound on the sole (nails)
- Eyelids

Wounds (often puncture wounds) that penetrate synovial structures are very dangerous. Yellowish/clear, sticky fluid (synovial fluid) oozing from the wound could be evident. These need to be treated aggressively (surgical flush) ASAP for better outcome. Horses become very lame within 24-48 hrs (or sooner if foreign body involved) of original wound and the affected joint/tendon sheath will be distended. Often horses show pyrexia and general malaise.

### **Wound Management**

If a wound is superficial and away from “dangerous” locations (i.e. Joints, tendon sheaths) clean with water, being careful not to drive foreign material into the depth of the wound. A slight swelling around wound is to be expected.

If lameness/ more severe swelling develops call the vet!

### **Wound closure**

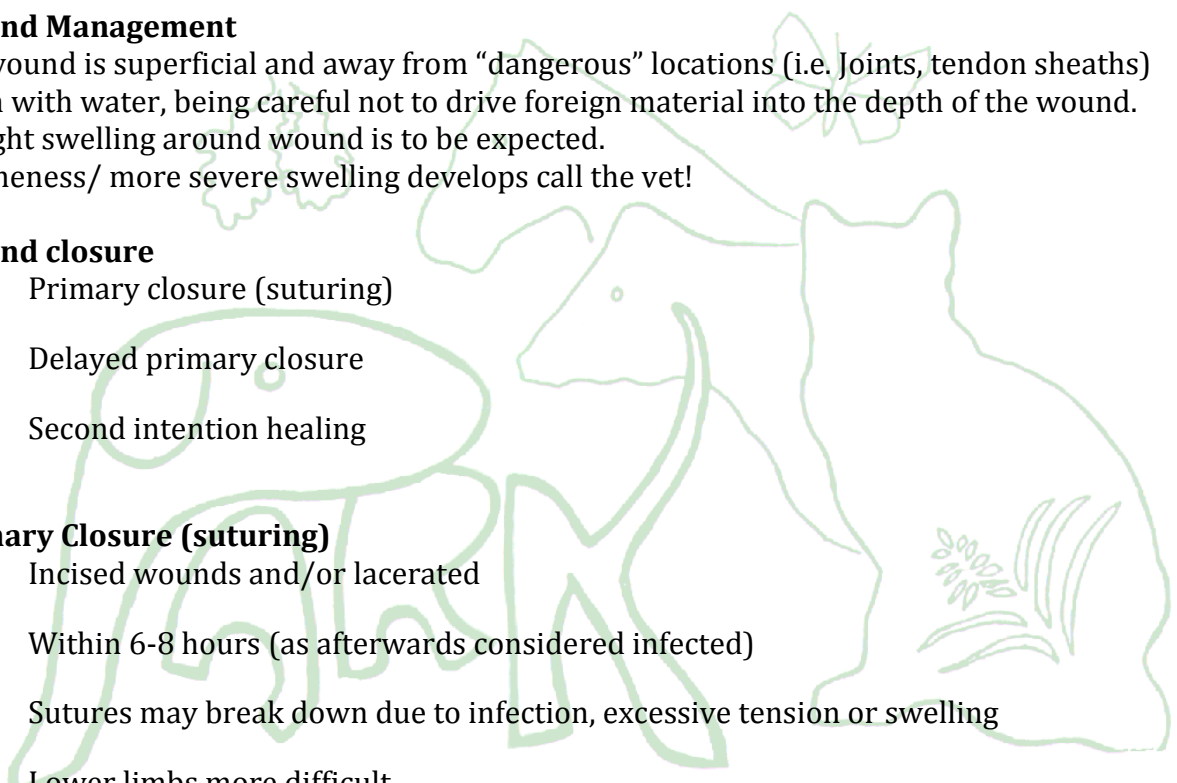
- Primary closure (suturing)
- Delayed primary closure
- Second intention healing

### **Primary Closure (suturing)**

- Incised wounds and/or lacerated
- Within 6-8 hours (as afterwards considered infected)
- Sutures may break down due to infection, excessive tension or swelling
- Lower limbs more difficult
- Drains may help to reduce swelling and tension on suture
- Usually removed after 10 days

### **Delayed primary closure**

- Used in clean wounds with extensive tissue damage.
- Initially wound is left open to aid removal of contamination/infection and/or until wound is free of necrotic tissue
- Wound is sutured



## **Second intention healing**

- The wound is left open and usually dressed
- Granulation tissue fills the wound from its depth
- Once granulation tissue has reached the margins of the wound, this starts to contract
- Contraction very weak in the distal limbs (especially horses vs ponies)

## **Excessive granulation tissue (proud flesh)**

- Especially lower limbs
- Often if wound is infected, or part of wound slower to heal (necrotic tissue)
- Needs to be removed to allow healing

## **Cleaning a wound**

- Diluted antiseptic (Hibiscrub/iodine), especially if wound old or grossly contaminated.
- Shave if appropriate (hydrogel/swab to prevent wound contamination with hair).
- Sterile saline solution.

## **Creams, ointments and sprays**

### Phase 1 (encouraging healing and keeping wound moist):

- CLEAN WOUND: Sterile Hydrogel, Manuka honey
- INFECTED WOUND (needing debriding): Dermisol ( $\pm$  topical antibiotics), Activated charcoal
- GRAZES/ SORES: Oxytetracycline spray, Silver Spray, Fucidin gel, barrier cream

Phase 2 (reduce amount of exuberant granulation tissue): Bluestone powder, Fucidin H, Vulketan

## **Dressings**

- First layer: (in contact with wound) Melolin, primapore, allevyn (depending on amount of exudate), activated charcoal for contaminated wounds
- Second layer: padding and support to first layer. Cotton wool, Gamgee, Soffban
- Third layer: Support. Crepe bandages, vetrap, elastoplast, PolsterPlast.
- Pressage (esp. Knees and Hocks)
- Hoods (for head and neck injuries)

## Medications

- Systemic antibiotics (oral or injectable)
- TETANUS prophylaxis (tetanus antitoxin if vaccination not up to date)

Anti-inflammatory drugs to reduce swelling (usually Phenylbutazone)

## Wounds involving eyes:

Often signs are:

- painful, closed eye
- Oedema of cornea (glazed appearance)
- Fluorescein stain to highlight lesion (ulcer)
- Treatment usually with topical antibiotics
- Early treatment important to prevent damage to the eye

