

# Therapy for Equine Lameness

Horse owners and trainers frequently have to deal with lameness, and need to prevent further injury to the horses musculoskeletal system. Most injuries encountered by a horse will involve the foot and soft tissue structures (joints and tendons and ligaments) in the leg. Bony injuries, such as fractures, chips etc also occur frequently, but are generally managed under the direction or treatment of a veterinarian. Injuries to tendons may involve damage to the tendon sheath, and /or the tendon.

Lameness therapy may be divided into therapy of an acute (e.g .occurred within the last 24 hours) or sub-acute and chronic (e.g. injuries which occurred days to years ago)

## **Acute lameness**

**Hoof Abscesses** are the most common cause of acute lameness. The horse may be three legged lame, but there will be little evidence of injury above the coronary band, and the lameness will not respond to anti-inflammatory medication. Hoof testers will locate lameness to the foot. Warm foot baths may help bring the abscess to a head. A farrier or veterinarian may be able to locate a tract in the hoof and open the abscess for drainage using a hoof knife.

**Soft tissue injuries.** The best step in therapy for these types of injuries is to rest a lame horse. This may mean confinement on a stall, or possibly a small out door pen. This may include hand walking and perhaps hand grazing throughout the day.

**Hydrotherapy** is the fancy term for cold hosing. Following acute injury there is the risk of excessive hemorrhage (bleeding), into tissues. The blood forms clots, which can then lead to scar tissue which may limit range of motion, cause pain, and impair performance. Cold hosing in theory cools the leg, causing constriction of the arteries and reduced blood flow. The water stream should be gentle and steady. Pulsating streams could increase hemorrhage, so avoid them in acute cases.

**Support** of the leg through bandaging, can protect injured soft tissues. If a leg is bandaged one should generally bandage the opposite leg also. This provides additional support for the sound leg, which will be under increasing load.

**Antiinflammatory Medications** such as phenylbutazone ("bute") may be administered for both their analgesic (pain relieving) and anti-inflammatory effects.

## **Sub acute and Chronic lameness**

Once hemorrhage is passed, therapy moves to increasing blood flow to the injured tissue, and managing swelling. Tendons and ligaments are not highly vascularized, and there is a need to maintain or reestablish circulation in these areas.

**Heat** is generally thought increase blood flow to affected limbs, and reduce pain. Similar effects may be achieved through application of agents that increase blood flow. Liniments( <https://en.wikipedia.org/wiki/Liniment>) include substances such as camphor (e.g. in Vicks), methylsalicylate (wintergreen). They have a mild irritation effect (counter irritation) which redirects nerve sensation from pain to one of general heat over an area of soreness. In addition, they increase blood flow (rubefacient). Alcohols (e.g. menthol) may also be used, which cause both increase in blood flow as rubefacients, but also evaporate and create a sensations of cooling, but without reducing blood flow. This varied mixture of hot and cold (e.g. icy hot (<http://www.icyhot.com/professionals/>) , can also divert pain. Thus counter irritation has both rubefacient and analgesic effects.

**Massage** of liniment may be helpful to the horse. Often the massaging is as effective in increasing blood flow as the liniment itself.

**Sweat wraps.** Care must be taken when applying bandages over liniments since there is the potential for too much irritation, with blistering or scurfing (hairloss). A sweat wrap is intended to provide sustained heat but without damaging the skin or blistering. Nitrofurazone may be applied, covered with saran wrap, and a bandage applied over the saran wrap.

<http://www.westernhorsereview.com/blogs/my-stable-life/sweat-wraps/>

**Reduction of Swelling.** With chronic injury or irritation, horses may develop excessive swelling or edema. A wrap may apply even pressure to help prevent the swelling and return the fluid to circulation.

**Poultices.** <https://en.wikipedia.org/wiki/Poultice> A poultice or cataplasm is a thick mixture applied to the horse's leg to draw out swelling and stimulate blood flow.