**NON-SURGICAL TREATMENT FOR EQUINE LAMENESS**

1. **Physiotherapy**

Important part of lameness rehabilitation for horses. Takes extensive training to perform these management techniques in conjunction with a diagnosis and treatment protocol outlined by a veterinarian.

* Massage- this promotes muscle relaxation and good circulation to promote and help with healing. It is commonly used for relieving focal muscle spasms.
* Muscle (Faradic) Stimulation- Transcutaneous electrical nerve stimulation (TENS) can stimulate different muscle groups and is used in cases with neurogenic atrophy e.g. Sweeny. This technique also helps in improving muscle tone and mass to atrophied muscles after contralateral limb disuse. It can also be used as a diagnostic tool.
* Controlled exercise- this involves simple and short timed exercises from simply walking out or using a treadmill which will allow for a gradual increase in strength and coordination. This method will allow healing to coincide with the natural recovery process.
* Swimming-allows the cardiovascular system to be exercised while reducing load on the limbs and allowing muscle groups to work.
1. **Therapeutic ultrasound**
* This method utilizes high frequency sound waves which promote tissue healing. The exact mechanism of action is unknown. Sound energy is converted to thermal and vibrational energy when in contact with tissue and this is believed to have effects that promote positive healing within the damaged tissue.
1. **Therapeutic laser**
* Low-intensity lasers have an effect on local circulation of the affected site and have biomodulation effects on the targeted tissue. This will trigger cell proliferation while providing analgesia although the exact mechanisms that occur within the tissue are not fully understood.
1. **Magnetic and electromagnetic therapy**
* Magnets are used in conjunction with other therapies to assist in fracture healing due to the significant finding that bone has piezoelectric properties. The pulsed magnetic fields may stimulate bone healing as well as provide analgesia
1. **Extracorporeal shock-wave therapy**
* High acoustic wave impulses are generated and focused on the area needed to undergo treatment. It is suggested that shock wave treatment may increase the regional blood flow to the area, have direct cellular effect and activate osteogenic factors, it is also known to have analgesic properties. Conditions in the horse treated with this technique can range from sore shins, insertional desmopathy, suspensory branch insertions and avulsion fractures and proximal attachment of the suspensory ligament. Stress fractures, subchondral bone pain as well as superficial/deep digital flexor tendonitis.

<https://youtu.be/ACrkuSm0OZ8>