



HOW IT WORKS

Equine Spas Hydrotherapy – How it works

Equine Spa hydrotherapy relies on four basic factors, namely temperature, salt concentration, depth of water and aeration.

Temperature

The application of cold triggers three basic reactions.

Firstly, at a cellular level, the metabolic response of the cells is reduced, so the cells need less oxygen to function and thereby suffer less hypoxic injury.

Secondly, the permeability of the blood vessel walls is decreased, thus reducing the amount of fluid that accumulates in the injured area.

And thirdly, the cold numbs the area to a certain degree, acting as a topical analgesic.

One of the best things about cold is that it does not override the beneficial effects of the healing process. Please note that the application of cold should not be overdone. The overuse of ice, for example, can cause tissue damage.

Salt Concentration

The salt concentration of the water has an impact on the healing process. Higher salt concentrations have a greater drawing effect influencing the dispersal of fluids accumulated around the injury.

Additionally, the proportion of various salts has been found to influence the resolution of the injury.

Depth of Water

The greater the depth of the water the greater is the physical pressure exerted on the tissues which, again, aids in the dispersal of accumulated fluids.

Aeration

Aeration of the water has a two fold effect, namely the dissolved oxygen level of the water is increased and the soft tissue is subjected to a gentle massaging action.

It is thought that the increased oxygen levels aids the healing process much as hyperbaric chambers do for humans while the massage effect influences dispersal of fluids.

In addition, horses tend to relax more than in still cold water as is evidenced by reduced heart rates.

CLINICAL TRIALS

Independent case studies were carried out at the University of Sydney in Australia to determine the efficacy of cold water equine spa hydrotherapy in the treatment of lower leg injuries in horses.

Having established the optimum conditions required to facilitate healing, clinical trials were, initially, conducted on 27 horses.

Positive results were replicated across a whole range of leg injuries including tendinitis (grade 2 & 3 lesions),

suspensory ligaments desmitis, chronic fetlock synovitis and penetrating wounds to the tendon sheath. Post operative recovery rates also increased, for example after a chipped bone removal from the fetlock joint.

Subsequent treatment of 65 horses confirmed these findings and showed that open wounds responded rapidly to treatment, hoof growth was stimulated, laminitis responded very well and even navicular syndrome improved in some cases.



Centre of Equine Therapy

Tel: + 44 (0) 2892 690056
www.cet-equine-spa.com

© CET Limited 2004 E&OE