Extra Corporeal Shockwave Therapy for Osteoarthritis

INTRODUCTION

Shockwaves are high-energy sound waves. In Extracorporeal Shock Wave Therapy (ESWT) these waves deliver energy deep into the body and can be used to treat a wide range of musculoskeletal conditions.

ESWT can be applied by Focused therapy (using piezo ceramic crystals to generate the shock wave, ideal for joint problems) or Radial therapy (using pneumatics to generate a pressure wave, ideal for soft tissue related treatment).

HOW IT WORKS

Shock wave energy is applied to painful regions where it can stimulate the body’s own healing response and accelerate this process. Shockwave works by direct and indirect effects on pain, inflammation and tissue regeneration. Diminishing pain by affecting nerves in the area, or in an anti-inflammatory effect

ESWT is used widely in human medicine, particularly for musculoskeletal conditions such as tendinitis/tendinopathy/osteoarthritis, and its use is supported by extensive research. It is also widely used on horses, for example in the treatment of suspensory ligament problems, navicular disease and stress fractures.

WHAT TO EXPECT

A course of shockwave treatment (for osteoarthritis cases) normally involve weekly treatment for 6 consecutive weeks.

Shockwave Therapy is non-invasive and does not require us to shave your animal’s fur. We use a conductive gel which is then wiped away. We always start at the lowest dose, and usually perform around 1000 – 3000 shocks per site.

Most animals tolerate this treatment very well, and we can do it conscious, to ensure we are monitoring their reactions and can reduce the dose if necessary. For some individuals they may find the first treatment uncomfortable so we ask that they are starved before their first appointment so that we can give some sedation if necessary. After treatment there are no special considerations, but continue any normal medications.

GAIT ANALYSIS

Gait analysis is integrated into the routine treatment for many patients, to help us to measure the effects of our treatments, to keep owners updated on their animal’s progress, and along with the owner questionnaires, to look at the effects of the treatment both subjectively and objectively. We ask owners to fill in a questionnaire periodically to see what influence the shock wave treatment is having, and perform computerised gait analysis before treatment, at the end of treatment and then 4 weeks after the end of treatment.

*We may also take videos and photos to be used in the analysis, and to support the work of the Queen’s Veterinary School Hospital/Surgical Discovery Centre in publications, to promote the services, and for education purposes.

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