

NEUROMUSCULAR ELECTRICAL STIMULATION (NMES)

What is NMES?

NMES – Is a form of electrotherapy which provides a low-level electrical current that causes skeletal muscle contraction by stimulating the nerve.

It is used in cases where patients will not / cannot use their limb(s) post surgery e.g. back surgery, neck surgery, and fracture repair or where there is severe muscle wasting following an injury to a limb

It can also be used in cases where the muscle has insufficient nerve control, for example

1. Peripheral nerve injury
2. Spinal cord injury
3. Strokes and other neurological conditions

Its therapeutic benefits are:

1. Prevention of disuse muscle atrophy (wasting)
2. Aids muscle re-education for non-ambulatory patients
3. Assists with muscle strengthening
4. Reduces swelling
5. Helps in pain management
6. Improve circulation to the muscle
7. Speed the regeneration of peripheral nerve

When should it be used and how often?

As soon as possible after injury or surgery. The frequency depends on the condition, but it can be used as often as once a day or just 1-2 times a week. Your physiotherapist will advise you accordingly.

Method:

The area to be treated is first prepared by clipping the hair and then wetting the skin. Electrode pads are covered in contact gel and then placed on the affected muscle groups. As the electrical current is delivered it will stimulate the motor nerves. Your dog will feel a tightening sensation in the area under the electrodes. The muscles may be seen to 'twitch' or if the intensity is increased the muscle will fully contract and some joint movement can be seen

Each patient is individual, and your physiotherapist will demonstrate safe application of NMES and advise you specifically in relation your dog's condition

NMES should be used in conjunction with a comprehensive rehabilitative exercise programme specifically designed for your pet following a thorough assessment by a qualified physiotherapist.