



There may be a misconception amongst many pet owners that musculoskeletal or neurological injuries are usually incurred only by those animals engaged in athletic disciplines or due to old age. But all pets are liable injuries - some more than others due to the nature of their management and the lifestyle that we as owners offer our pets.

reatment of musculoskeletal or neurological conditions relies upon a team approach involving the veterinary surgeon, the animal physiotherapist and the owner. Following diagnosis by the vet, the case is often referred for physiotherapy to assist recovery, a return to function and to achieve maximum potential - dependant on age, condition, ability.

Animal physiotherapy treatments are never prescriptive, and the basic concepts of treatment and rehabilitation which may be applied to each case must be adapted to suit each individual case. The use of techniques applied with skill and which aim to improve movement and restore normal muscle control are the remit of the animal physiotherapist, alongside with working with the owner to produce a home rehabilitation programme that will suit the individual pet.

When treating musculoskeletal and neurological conditions there is a structure to be followed: • Firstly, the animal physiotherapist needs to liaise with the referring veterinary surgeon to get the veterinary diagnosis and information on any

medication being prescribed – some medication will affect the treatment.

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• Then take a detailed case history – this allows the physiotherapist to understand what has occurred and may have led to the current problem. Before animal physiotherapy commences it is important to establish whether the condition is acute, subacute or chronic – as this this will influence the treatment and the rehabilitation programme In all musculoskeletal or neurological conditions, a good programme will consist of a detailed case history, observation - at rest and in movement, palpation and massage, range of movement, stretches, electrotherapy and an appropriate rehabilitation programme At each session re-assessment will govern the next step in the programme.

In order to give our pets, the best possible chance of recovery this structure should always be employed by the animal physiotherapist. If early rehabilitation is too intense the result may be detrimental to the long-term health of your pet.

Progression of the treatment and rehabilitation programme relies upon reassessment of the animal and the condition before any increase or change is made. It is



important to remember that we are dealing with a non-verbally responsive animal – they cannot tell us that they may still be hurting or sore – it is the palpation skills of the animal physiotherapist which gives us this information and allows us to refer back to the treating veterinary surgeon.

COMMON CONDITIONS:

 Osteoarthritis, joint pain, inflammation and stiffness

- Muscle, ligament and tendon injuries
- Orthopaedic conditions (e.g. hip dysplasia, fractures)
- Neurological conditions (e.g. slipped disc)

KEY INFORMATION ON REHABILITATION

- Any rehabilitation programme will be dependent upon the stage of tissue healing
- Progression will be dependent upon reassessment
 - There is sometimes a tendency to do too much too soon, remember 'less is often more'. It is common for a patient to improve then plateau for a while before showing more improvement allow this time before increasing any rehabilitation

PRINCIPLES FOR REHABILITATION:

Avoid aggravating the condition:

Rehabilitation needs to be correct for the current state of the tissues.

Timing: Initial rehabilitation will be to lessen the amount of exercise and the programme is targeted to pain management (including the use of heat and ice), time

should be allowed for postural changes to occur. Slow lead walking is the primary rehabilitation technique – many of our pets who come for treatment have developed an abnormal walking action – and builds muscle mass on the affected limb and alleviates some of the compensatory effects.

Rehabilitation of injured tissue will easily fatigue so allow tissue to recover before increasing any rehabilitation exercises.

Compliance: Some pets may be too excited or too aggressive to be able to follow through a rehabilitation programme – the skilled animal physiotherapist will be able to make changes and come up with ideas on how to implement rehabilitation suitable for that individual. Programmes should always be realistic when considering the time and ability of the owner.

Each case is individual: Even if the injury is the same as other patients each animals' response to the injury and surgery will be different. It will be affected by physical variables; physiological and chemical plus age-related issues, as well as non-physical variables such as management

at home; other pets in the home, stairs, laminate floors and any time restrictions or expectations of the owner. Rehabilitation for a 2-year-old dog with OA will be different to rehabilitation of a 12-year-old dog with OA.

Rehabilitation should follow a specific sequence which is related to the physiological response of the tissue to healing.

Intensity: Whilst challenging the injured area, it should not aggravate the injury.

Treat the whole animal: Most conditions have begun to affect your pet a long time before any visible signs are obvious enough for you to take them to the vet. Discrete compensation in movement over a period of time leads to other areas becoming effected – when rehabilitating any condition, the animal physiotherapist will look to include treatment of the whole patient in the programme.

Any sustained period of pain will not only influence other parts of the body but will also influence the mental status – therefore all treatment should be aimed at restoring the mental as well as the physical wellbeing of the patient.

Our pets cannot tell us when they are feeling ill, sore or painful and small behavioural changes are often the first indicator that all is not well. A pet who has always been happy and well behaved but who suddenly begins to snap at an owner, has not suddenly decided to be aggressive and it is our responsibility as pet owners to find out what has changed in their lives which has led to a change in behaviour.



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TREATMENT OF NEUROLOGICAL CONDITIONS

Neurological conditions present a different set of challenges for the owner and the animal physiotherapist. As an owner we may have to come to terms with the fact that full function may not return - this may include poor bladder and bowel control or loss of function in the hindlimbs.

Diagnosis is made by the veterinary surgeon and medication given; surgery may be required, and any physiotherapy intervention must consider the stage of recovery.

The treatment structure is similar to that employed for treating musculoskeletal conditions; assessment, massage, range of movement, assessment of neurological responses, stretches may be contraindicated but where they are indicated must be carried out with care. Appropriate electrotherapy and rehabilitation exercise for aiding recovery in neurological cases will be part of the programme.

Several factors need to be considered when dealing with neurological patients:

- Physiotherapy should begin as soon as the veterinary surgeon has given permission
- These cases need regular assessment as early improvement is often minor and can be missed by the less skilled observer
- They are labour and time intensive for the owner
- Dynamic movement i.e walking should only be attempted once the patient's ability to stand has improved – don't run before you can walk when it comes to rehabilitation
- Neurological patients fatigue very quickly, so all work on them should be little and often
- If pain is still present and the patient is uncomfortable, then rehabilitation exercises may exacerbate the situation. The patient should be referred back to the vet for further assessment or medication



A range of techniques can be employed by the animal physiotherapist and under the guidance of the physiotherapist by the owner:

- Cold and heat therapy to help reduce swelling, give pain relief and/or promote tissue healing.
- Massage
- Stretching
- Slow walking
- Rehabilitation techniques, e.g walking over poles to help promote bending of joints and gait action
- Electrotherapies (e.g muscle stimulation, ultrasound and laser therapy)



promote bending Hydrotherapy/waterof joints and treadmill therapy can gait action provide a range of benefits and is most beneficial when used in conjunction with a physiotherapy programme - the owner can be carrying out daily treatment between swims. The physiotherapist is key to judging when best to commence hydrotherapy particularly, when your pet and the tissues are in a weakened state

In all cases of musculoskeletal or neurological conditions and injuries, the welfare of the animal is paramount and when all those involved in each case work as a qualified team, our pets can be assured they will receive the best of care.

The National Association of Veterinary Physiotherapists (NAVP) is the professional body for graduates of BSc and PgD/MSc Veterinary Physiotherapy degree courses.



All members have professional and public liability insurance and adhere to the Conditions of Membership, Code of Conduct and Continuing Professional Development requirements.

The NAVP are always committed to promoting excellence in veterinary physiotherapy and hold the welfare of the animal paramount.

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