Veterinary Information Pack

VIP Vet Physio

Sally Medcalf
MCSP, MSc (Veterinary Physiotherapy)
ACPAT Cat A
Coombe Lodge, Wendover Road,
Butlers Cross, Bucks HP17 0TZ
07842 149406 (mobile)
01296 622503 (fax)
email: samedcalf1@aol.com
www.vipvetphysio.co.uk
About Sally

I have a wide range of experience with a variety of animals from small furries to horses. I have trained to BHSAI standard; competed at riding club national championship level and I now train and compete with my agility dogs. I am a grade 6 handler and competed at Crufts in 2008 and 2009 with Millie Mops my small terrier. This has lead to my special interest in the treatment of working and performance dogs.

I have combined my life-long passion for all animals with over 30 years experience in physiotherapy by completing a Masters Degree in Veterinary Physiotherapy at the Royal Veterinary College.

I am a Category ‘A’ member of ACPAT (Association of Chartered Physiotherapists in Animal Therapy); a long standing member of the Chartered Society of Physiotherapy (MCSP); and hold state registration with the Health Professions Council (HPC). These bodies ensure that members maintain their competence through CPD. I have full professional liability insurance covering the treatment of both human and animal patients.

In accordance with the Veterinary Surgeons Act of 1966, I will only treat on receipt a written veterinary referral.
Veterinary Physiotherapy

Veterinary Physiotherapy has been recognised for the past 25 years, and is an invaluable adjunct to veterinary medicine in the treatment of large and small animals. The overall aims of physiotherapy are to relieve pain, maintain or improve mobility, function and independence.

Physiotherapy plays a vital role in healing, pain relief, and rehabilitation after injury, illness, disease, or following surgery. As the types of operation available have advanced; so has the need for the appropriate pre and post-operative rehabilitation that I can provide. This addresses proprioceptive loss, retraining neural control, improving static and dynamic core stability, increasing joint range of movement, muscle strengthening and movement re-education.

Physiotherapy is also important in the management of more long-term chronic conditions and those associated with old age such as osteoarthritis. Physiotherapy assists with non-pharmaceutical pain relief, maintaining strength and flexibility, restoring lost normal movement patterns, promoting cardiovascular fitness and improving the general quality of life.

Physiotherapy is also valuable for performance enhancement and injury prevention in performance or working animals. Regular checks can identify areas of stiffness, soreness, and weakness in muscles and joints, which can be addressed before they create a more serious problem.

All treatment is assessment led. Each animal has a detailed musculoskeletal assessment in order to identify variations in their normal movement patterns, and which soft tissues are causing the functional problem presented. Normal movement will be prevented if soft tissues are restricting, weak or painful; or if the animal is unloading a painful joint. If allowed to continue untreated, compensatory patterns of movement develop which themselves create further soft tissue adaptations creating a vicious circle which will continue until eventually a structure breaks down. An individual treatment programme will then be prescribed.

Whether treating a performance or working animal, or a much loved companion, all are treated with care, respect and compliance. I am committed to a multi-disciplinary approach liaising with the referring veterinary surgeon and other professionals (e.g. trainer, farrier, and saddler).
Treatment Techniques Available

Following a detailed assessment, a treatment programme will be individually prescribed. This may include manual therapy, electrotherapy, thermal therapy, movement therapy, thermoplastic splinting and a home programme package.

Manual Therapy

These are hands on techniques which are useful in reducing muscle spasm, relieving pain, reducing soft tissue adhesions, mobilising deep structures and improving joint mobility:

- Peripheral and spinal joint mobilisation.
- Soft tissue techniques, such as deep massage, myofascial release and trigger point release.
- Reflex inhibition using the animal’s natural reflexes to stimulate joint mobilisation and soft tissue stretch.
- Passive stretches and range of movement exercises.

Electrotherapy

Laser, ultrasound and pulsed electromagnetic energy all work at a cellular level to provide pain relief, promote the resolution of inflammation, reduce swelling, improve the quality and speed of healing, and the reduction of scar formation.

**Infra Red Laser:** This is used for wound healing and superficial lesions in tendons, ligaments, joint capsules and muscles. It can be used for pain relief over peripheral nerves or centrally at nerve roots. It can also be used to enhance the body’s immune and lymphatic system.

**Blue Light Laser:** This has an antibacterial effect and is used for the treatment of contaminated wounds and abscesses.

**Ultrasound:** This is able to penetrate to deeper structures (up to 5cm) and is excellent at healing ligaments and joint capsules. It is also the treatment of choice in reducing old scars in all soft tissues including muscles.
**Pulsed Electromagnetic Energy:** This penetrates to the deepest structures and has a variety of different effects depending on the frequency used:
- Promotes healing in all soft tissues, joints and muscles.
- Promotes and hastens the speed of bony union in both traumatically and surgically induced fractures.
- Pain relief over peripheral nerves or centrally over nerve roots.
- Induces vasoconstriction to reduce swelling in acute inflammation.
- Induces vasodilatation in muscles in preparation for exercise.

**TENS:** TENS can be used for pain relief using the pain gate theory or by inducing the release of the animals own endorphins. This is most beneficial for acute pain e.g. following spinal surgery.

**Neuro Muscular Electro Stimulation (NMES):** NMES can be used to maintain muscle bulk if peripheral nerves are temporarily damaged; for retraining a correct pattern of muscle recruitment; to strengthen very weak muscles in early stage rehabilitation and to mobilise bound down muscle fibres and normalise tone.

**Thermal therapy**

**Cryotherapy:** This includes ice packs, ice massage and cold water irrigation. It is used to reduce acute soft tissues inflammation following trauma or surgery. It reduces swelling and has direct pain relieving properties by acting on peripheral sensory nerves. It often forms part of a home programme

**Heat:** This can be applied via wheat or gel packs. It is used for pain relief in chronic conditions of joints and muscles, reduces muscle spasm and increases local blood flow. It can also be used as a preparation for exercise and often forms part of a home programme.

**Exercise and Rehabilitation Programs**

Exercise programmes are individually prescribed and aimed at restoring full functional activities, and may include the following:
- Baited active mobilising exercises.
- Muscle strengthening exercises.
- Core stability exercises.
- Balance and coordination exercises.
- Proprioceptive rehabilitation.
- Gait re-education and training.
- Re-training functional activities and movement patterns.
- Training and schooling advice.
- Sport specific rehabilitation.
Physiotherapy for Companion Dogs

Dogs can suffer from a wide variety of orthopaedic and neurological conditions. Physiotherapy can play a vital role in the management of these conditions whether they are treated conservatively or surgically. As the types of operation available have advanced, so has the need for the appropriate pre and post operative rehabilitation. Physiotherapy can also offer non-pharmaceutical pain relief and techniques to improve and hasten both soft tissue and bony healing.

Dogs that have a painful or movement restricting condition, or a sub clinical disease, will alter their gait patterns to take the stress off the sore area. These compensatory patterns of movement create muscle imbalance and weakness, shortened soft tissues and altered neural control. Physiotherapy assists with increasing and maintaining strength and flexibility, restoring normal movement patterns, regaining lost function and promoting cardiovascular fitness.

Common conditions of the young dog that physiotherapy can help with:

- Hip dysplasia
- Elbow dysplasia
- Osteochondrosis dissecans
- Patella luxation
- Muscle contractures e.g. infraspinatus; gracilis
- Angular limb deformities

Common traumatic conditions that physiotherapy can help with:

- Fractures
- Fibrocartilaginous embolism (spinal stroke)
- Acute & chronic soft tissue injuries, involving muscle, tendon, ligament or joint capsule.
- Severe soft tissue and bony damage following a road traffic accident, possibly resulting in amputation of a limb
- Joint luxation
- Nerve injuries
- Spinal disc disease

Common conditions of the older dog that physiotherapy can help with:

- Cranial cruciate ligament disease
- Arthritis
- Spondylitis
- Weight control issues

Physiotherapy can help with the management of geriatric dogs by maintaining or improving their mobility, flexibility, strength and muscle tone, and providing symptomatic relief for arthritis.
Physiotherapy for Working Dogs

In addition to all the conditions that companion dogs can suffer from, working dogs are susceptible to additional stresses and strains. Any loss of performance during the season should be investigated as this may be due to minor musculoskeletal injuries that have gone unnoticed. If these injuries are left untreated they can cause more serious damage over time. It is also recommended that working dogs have pre and post season or periodic health checks to screen for minor injuries.

Signs of injury:
- Acute inflammation, pain, heat, swelling
- Loss of performance or endurance
- Shortened stride
- Taking down poles or not clearing obstacles
- Sensitivity to touch
- Stiffness
- Abnormal posture
- Shifting weight off one leg
- Muscle wastage
- Lameness
- Temperament or behavioural changes

Agility and Flyball

These are high-risk sports due to the high speeds, twisting, turning, and accelerating and braking forces that the dogs are subjected to as well as concussion on landing impact. This can cause a variety of acute and chronic soft tissue injuries, involving muscle, tendon, ligament, cartilage, or joint capsule.

Weaving is an un-natural movement requiring extreme alternate side flexing of the spine predisposing dogs to joint and muscle strains and exaggerated shoulder movements to the end of range, predisposing dogs to bicipital tenosynovitis and shoulder joint capsule strains.
Causes of injury:
- Slipping
- Falls from equipment
- Miss-timing
- Uncoordinated muscle action
- Impact on landing
- Collisions
- Over extension of joints
- Repetitive stress injuries

Field and Working Trials

During training, dogs are expected to perform over many hours in all weather conditions and sometimes over harsh terrain. Fatigue is a contributory factor to sustaining muscle or joint injuries.

Typical injuries:
- Cuts and abrasions
- Muscle strains
- Bruising due to collisions
- Concussion from landing impact
- Infraspinatus contracture

Obedience and Heel Work to Music

During heel work sustained extended and right side flexed neck postures can lead to muscle fatigue and strain in the neck. This in turn can lead to muscle imbalances lower down the spine, and in the limbs, due to compensatory patterns. Some taught movements in heelwork to music require sustained contraction of the small postural control muscles of the back and limbs, which predisposes them to fatigue and injury.
Physiotherapy for Cats

Cats are natural athletes and as a result can suffer from muscular strains due to mis-timing, falls or collisions. Veterinary physiotherapy can relieve pain and promote the healing of these soft tissue injuries.

Cats also sustain wounds and injuries from cat fights. Wounds, especially those caused by bites, are susceptible to bacterial infection and abscess formation. Laser therapy is particularly useful in resolving infection and promoting healing.

Cats are frequent victims of road traffic accidents which can result in major orthopaedic and neurological injuries. Veterinary physiotherapy plays a vital role in their rehabilitation following serious injury.

Laser can be utilised to promote the healing of soft tissue damage, especially in the closing of large areas of skin loss.

Pulsed electromagnetic energy can be used for fractures to hasten bony repair.

Exercise, movement therapy and home programs will be individually designed to retrain lost movement patterns due to neurological damage or pain-relieving compensatory patterns.

Veterinary physiotherapy can be valuable in the management of the elderly cat, providing pain relief and maintaining strength and mobility in long-term chronic conditions such as osteoarthritis.

Expert advice is always available to assist owners in the general management of their cats and in ways to encourage their cats to co-operate with home treatment programs which will be an essential part of most treatment packages.
Equine Physiotherapy

Horses can exhibit musculoskeletal problems in a variety of different ways, from a subtle decrease in performance, or stiffness on one rein; through to schooling difficulties or behavioural problems; and eventually unsoundness and breakdown of tissue.

Normal movement will be prevented if soft tissues are restricting, weak, or painful. If untreated horses will use compensatory patterns of movement in order to continue to meet the demands made upon them. Over time, these compensatory movement patterns create further soft tissue adaptations, creating a vicious circle which will continue until eventually a structure breaks down.

The aim of equine physiotherapy is to identify and treat the soft tissue problem and re-train new efficient movement patterns.

Common Schooling difficulties and indications of musculoskeletal injuries:

- Stiffness and resistance especially showing an increased one sidedness
- Difficulty getting an 'outline' or engaging hindquarters
- Difficulty obtaining correct canter lead or disunited canter
- Shortened stride length
- Loss or performance
- Taking down show jumping poles, especially combination fences
- Unexplained resistance i.e. buck, rear, nap and refuse
- Changes in behaviour or temperament

Horses are predisposed to neck and back problems due to the very fact that we ride them. Contributory factors include:

- Working in an incorrect outline with the back in extension
- Carrying the weight of an unbalanced rider
- Incorrectly fitted saddle
- Mouth pain
- Inadequate fitness
- Working when fatigued
- Foot imbalance
- Over stretching lumbo-sacral joint
High performance horses work very close to breakdown threshold of their flexor tendons and suspensory ligaments when galloping, this together with degeneration due to aging, and poor regenerative properties, makes them susceptible to serious injury. Electrotherapy techniques such as ultrasound, laser and pulsed electromagnetic energy can be beneficial in treating both the initial inflammatory stage of injury and in the production of a better quality repair.

Electrotherapy techniques are also beneficial in treating wounds sustained from direct injury, haematomas from kicks and collisions, and in reducing the subsequent scar tissue, which is particularly important for show horses.

It is advisable for all ridden horses in regular work, or competing at pony and riding club level, to be assessed two to four times a year. For those competing at a higher level, more regular input may be required. Pre and post major competitions checks will ensure that horses can perform at their optimum level and that any competition induced strains are resolved quickly.
Veterinary Physiotherapy Consent Form

Owner’s Details
Name: 
Address: 
Telephone: 
Email: 

Animal’s Details
Name: 
Age: Sex:
Breed: Colour:

Diagnosis:

Medication:

Investigations:

Pre-existing conditions:

I consent to this animal having a physiotherapy assessment and appropriate treatment

Practice Address: 
Telephone: 
Email: 
Vet’s name (print): 
Vet’s signature: Date: