REVIEW

Animal physiotherapy

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Summary
Animal physiotherapy is a field of growth in the UK due to factors including increasing client (owner) awareness and demand. Advances in veterinary diagnostic and treatment technology have lead to increasingly sophisticated and integrated veterinary management of both companion and performance animals, and overall increases in animal longevity.

Using human physiotherapy techniques to manage similar problems in veterinary patients is not a new phenomenon however. Animal physiotherapy can trace its origins back to at least the early 20th century in the UK. Specific legislation citing the application of ‘Physiotherapy’ in veterinary medicine first appeared over 40 years ago (Veterinary Surgeons Exemptions Order, 1962). The Association of Chartered Physiotherapists in Animal Therapy (ACPAT) was founded as special interest group of the Chartered Society of Physiotherapists (CSP) in 1985, and has a growing membership (to date has over 150 fully qualified Category A members in the UK).

In 2000, the first intake of students were enrolled on the M.Sc./Post-Graduate Diploma in Veterinary Physiotherapy at the Royal Veterinary College, London. This program of part time study was developed to provide chartered physiotherapists with the ability to apply their professional knowledge, experience and practical therapy skills to the treatment of animal patients. M.Sc. students are required to complete an original research project, contributing to the development of a much-needed scientific evidence base for veterinary physiotherapy.

This article aims to provide an overview of the treatment of animals with physiotherapy from the perspective of an ACPAT physiotherapist. Some understanding of human manual therapy principles and nomenclature is assumed.

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Why do animals need physiotherapy?

The reasons for animals requiring physiotherapy are much the same as why people need and benefit from it including:

- Optimizing recovery from illness and injury.
- Managing musculoskeletal problems caused by faulty biomechanics, less than optimum physical fitness, demands of lifestyle or faulty ergonomics.
- Enhancing athletic performance in sport whether amateur or elite.
- Minimizing dysfunction and disability in degenerative conditions.
What animals/conditions are commonly seen?

Horses and dogs are the most common animals seen in veterinary physiotherapy practice, although agricultural animals such as cows, sheep, goats and alpacas and companion animals such as cats and rabbits are infrequently referred. Principles of treatment can be applied to more exotic or wild animals, including birds and reptiles, although of course additional species-specific knowledge of anatomy, physiology, biomechanics, behaviour and husbandry/handling is required. Some interesting anatomical anomalies do arise. For example, while most mammals and birds have ossified patellae in their stifles (knees), these are absent in red kangaroos and certain wallaby species (Holladay et al., 1990).

Examples of cases commonly seen by veterinary physiotherapists include:

- Dogs for rehabilitation after orthopaedic/neurological surgery such as canine cranial (anterior) cruciate repair or spinal decompression for disc lesions (Figs. 1–3).
- Horses with muscular tension/spasm/irritability/wasting/imbalance caused by poor fitting saddlery/unbalanced riders/compensating for lower leg biomechanical problems. Commonly present as poor performance or behavioural problems such as bucking under the saddle.
- Dogs with degenerative joint disease complicated by obesity and a sedentary lifestyle (Fig. 4).
- Horses used in equestrian sport where a minor benefit to performance can mean the difference between winning and finishing out of the placings in a competition or race. This will have consequences for a professional rider/trainer’s livelihood, sponsorship deals or chance of team selection. The British Equestrian Federation presently employs two Association of Chartered Physiotherapists in Animal Therapy (ACPAT) physiotherapists to assist in the management of equine athletes in Eventing, Dressage and Showjumping disciplines representing Britain at the international level (Figs. 5a and b).
Legal and professional framework

In the UK, treating animals with physiotherapy is more restricted than treating humans. Under the Protection of Animals Act (1911) owners can legally treat their own animals with any non-invasive procedure or technique that does not compromise the animal’s welfare.

However, the Veterinary surgeon’s act (1966) states that with certain exceptions that only a Veterinary Surgeon (Veterinarian) may carry out Veterinary Surgery on animals. Veterinary Surgery is so defined by the act as to include:

- The making of a diagnosis.
- The carrying out of tests for diagnostic purposes.
- Medical and surgical treatment.

Of the exemptions created by the Veterinary Surgeon’s (Exemptions) Order (1962), one permits the treatment of an animal by ‘physiotherapy’, provided such treatment is given by a person acting under the directions of a veterinarian who has examined the animal and has prescribed the treatment of the animal by physiotherapy. ‘Physiotherapy’ is interpreted as:

- Including all kinds of manipulative therapy including osteopathy and chiropractic.
- Not including acupuncture, homeopathy or aromatherapy.

Therefore, in the veterinary field, UK physiotherapists do not have professional autonomy and cannot act as sole contact practitioners or diagnose conditions. The documented consent of an animal’s veterinarian is required before any physiotherapy treatment, in addition to the consent of its owner. Certain techniques (most notably acupuncture) cannot legally be performed on animals except by a veterinary surgeon, regardless of the experience and qualifications the therapist may have in human medicine.

AC PAT members are required to take out supplementary professional liability insurance to cover the treatment of animals. Failure to comply with the terms of the Veterinary Surgeon’s act renders this insurance invalid, and breaches professional conduct, making them liable to disciplinary action from the CSP.

Unfortunately, as in the human field, unqualified/unregistered (and uninsured) practitioners are more inclined to work in breach of the present legislation, and outside the scope of professional regulation. Clients need to be educated on the
potential pitfalls of using the services of unqualified practitioners, especially in the limited scope for recompense in situations of alleged negligence or malpractice, which in turn may be more likely due to lack of appropriate training on pathology/ contraindications.

The legal and professional position of a human therapist looking to begin treating animals will differ considerably depending on local national and/or state legislation. In some states of the USA ‘treatment’ of animals is illegal if performed by anyone other than a qualified veterinary surgeon, while ‘rehabilitation’ may be permissible. In Australia, a formal post-graduate program of study (Master of animal studies/animal physiotherapy) has recently been developed at the University of Queensland, although physiotherapists can presently treat animals referred by veterinarians before having gained these qualifications. Ireland does not have an equivalent of ACPAT, although a recent paper reports 92% of responding Irish veterinarians would support the establishment of a register of animal physiotherapists, and 64% agree that post-graduate training is an appropriate career path (Doyle and Horgan, 2006).

This article lists contact details of international organizations associated with animal physiotherapy as sources of further information. Individuals are advised to check their individual local circumstances before embarking on any form of animal treatment.

Consideration should be given to the following:

- State/national law concerning animal welfare and veterinary practice.
- Professional/Registration body (human)—does it recognize animal treatment to be within your scope of practice and/or impose any restrictions/requirements related to animal practice?
- Professional and public liability insurance—will it cover animal treatment and are the limits adequate to cover potential liabilities (consider the potentially high value of some animals being treated such as racehorses/stud animals).
- Personal injury insurance/income protection insurance—will you be covered if injured while treating an animal?

Transferring human therapy skills to animals

All ACPAT animal physiotherapists are required to first train and gain experience working as human physiotherapists, acquiring knowledge of anatomy, physiology, pathology, pharmacology, and skills in assessment and treatment with manual therapy, electrotherapy and exercise therapy. Learning to evaluate and progress treatment regimes and develop communication skill with patients/carers and other members of the healthcare team is considered as important as is encountering a wide variety of clinical cases.

Animal physiotherapy training focuses on developing an understanding of anatomical, physiological and biomechanical differences between humans and animals, and how to adapt assessment and treatment methods accordingly. The focus is on quadrupedal mammals and on the anatomical, biomechanical and behavioural differences between carnivores (dog model) and cursorial or grazing mammals (horse model). Even in a given species significant variation can be seen, predisposing to different musculoskeletal pathologies (example: compare the size and shape of a Great Dane to a Dachshund). Different individuals of a given breed will also have slightly different structural anatomy or conformation. Animal physiotherapists need to become highly skilled in evaluating an individual animal’s conformation and movement/gait patterns, with a view to both managing presenting problems and preventing future problems.

Most animal therapists gravitate to the job because of a background of interest and involvement with animals, particularly horses or dogs. Although it is possible to be a successful veterinary physiotherapist without having been ‘born in the saddle’ or ‘raised by wolves’, a level of confidence and competency in handling small and large animals is required, as well as a knowledge of animal behaviour and husbandry.

Comprehending and appropriately using the jargon/nomenclature relevant to the animal and its use is essential. This is particularly evident in equine and canine sporting disciplines such as dressage, show jumping, eventing, horse and greyhound racing and canine agility. An understanding of the discipline specific athletic requirements of sporting animals is also essential in formulating treatment plans and gaining optimal compliance from owners/riders/trainers. Present ACPAT training requires members to become competent in treating both horses and dogs, rather than focusing on a single species.

Challenges of assessment—locating the problem

As no one besides a veterinary practitioner can diagnose specific pathology in animals, therapists
concentrate on identifying specific functional problems on assessment that can be treated and then re-evaluated. Even where a clear, known pathology exists (e.g. a specific muscle strain), individual assessment is required to identify potential predisposing factors as well as specific problems and goals that influence a treatment regime.

One of the biggest perceived challenges to extrapolating human physiotherapy skills to animals is that 'they can't tell you where it hurts'. However, consider how frequently in human practice that subjective perception of the area and nature of pain is different to the location of the primary problem, and how relying solely on subjective information can be misleading.

Subjective assessment involves questioning the human 'client' who presents with the animal to be treated for specific clues as to the underlying biomechanical problems, as well as background information that will help to arrive at mutually agreed functional goals. The subjective assessment is therefore similar to third person assessments where a parent or carer answers for a patient who is unable to communicate. As with human subjective assessment, 'filtered' information may prove highly useful or otherwise. Subjective assessment also enables the therapist to evaluate the relationship between the client and their animal, which may give clues as to behavioural aspects to the presenting problem. Dogs are particularly adept at exploiting owners if their initially pain-related signs and symptoms are met with ongoing rewards, for example night-time whimpering being associated with human attention, a walk and possibly even an edible treat.

Objective assessment relies on skilled observation of static posture and movement at the various gaits, and functional movements such as turning/reversing. Horses may need to be seen ridden or jumping to provoke the specific problem. Access to an alternative rider is always beneficial in cases where rider capability or physical impairment is suspected in the presenting problem.

As animals are unable to comply with requests for specific movements, active joint range and muscle strength assessment are made on the response to functional movements and facilitating specific reflexes. Whole body palpation and passive joint range/muscle length tests are inevitably performed on horses while they are standing. Dogs can be assessed in standing, sitting or lying. Where a neurological deficit is suspected specific neurological assessment tests are performed. Some therapists use electrical modalities such as electrical muscle stimulation (EMS) to assist in the assessment of muscle function.

As different species/breeds and individual animals have varying responses to these tests, it is a key skill of the animal physiotherapist to interpret behavioural feedback in conjunction with the local tissue response to palpation to determine painful regions. Some understanding of the subtleties of animal behaviour is required to tactfully explore such painful sites while minimizing the chance of the animal needing to give a clearer sign that you need to back off (i.e. by biting or kicking). Although some patients may require additional restraint or sedation for assessment and treatment to take place safely, most animals tolerate assessment and treatment of painful regions remarkably well.

Problems identified on assessment may include:

- Postural asymmetry
- Gait asymmetry
- Pain
- Heat
- Oedema
- Joint hypomobility
- Joint hypermobility
- Joint effusion
- Soft tissue adhesions/restriction
- Muscle trigger points
- Muscle spasm/irritability/tightness
- Muscle wasting/weakness/paresis
- Patterns of muscle imbalance
- Sensory/proprrioceptive deficit.

Challenges of treatment

Formulating treatment plans

Formulating effective treatment plans depends on identifying problems for which physiotherapy treatment is appropriate and likely to be effective. Prioritizing problems and deciding appropriate treatment technique selection and dosage will be determined using clinical reasoning similar to that applied in human practice. In addition the temperament and tolerance of the patient and the resources and capacity of the client to afford treatment and comply with home treatment regimes need to be considered when setting treatment goals.

Many problems identified on assessment may be secondary or even tertiary to problems that are best managed by other members of the veterinary care team, so good communication links with and timely referral to farriers, dentists, saddle fitters, behaviour specialists and trainers are essential.
Treatment methods

Individual therapists have their own preferences, but most use a combination of the following:

- **Manual therapy**—stretching, joint/soft tissue mobilization, manipulation using principles of reflex inhibition, myofascial release, trigger point release and massage.
- **Electrotherapy**—ultrasound, laser, electrical muscle stimulation, TENS, H-wave, static and pulsed magnetic therapy.
- **Exercise therapy**—specific training regimes using obstacle courses/poles, progressive loading using alterations of gradient, surface or speed at which exercise is performed, using weights that are placed on body or limbs, pulled by a sleigh or cart, facilitation of postural/balance reactions including use of wobble boards/gym balls, strapping/taping to alter proprioceptive input, hydrotherapy (including water treadmills) (Figs. 6–8).

As with human practice, the technique used may not be as important as the skill with which it is applied, and the quality of the clinical reasoning used to arrive at technique selection. For any treatment to be effective, the right technique, for the right problem at the right dosage for the appropriate stage of healing needs to be applied in the right place. This requires careful assessment and reassessment of the patient’s response during and after treatment and modification, progression and general fine-tuning to ensure the overall response is as close to optimum as possible. So, although many ‘physiotherapy’ treatment techniques can be used by owners, trainers or para-professionals, veterinary physiotherapists would caution that using these techniques in the absence of adequate (re)assessment may not achieve the desired result and may potentially be detrimental.

Logistical challenges

Treatments can take place anywhere from a modern veterinary hospital to a muddy field with no light, shelter or hard standing, Horses and large
animals (unless under general anaesthesia) are treated standing, so the therapist is always working with a baseline level of postural tone. A greater variation in starting position and repertoire of techniques is possible in smaller animals (e.g. physiological lumbar rotation lying see Fig. 9). The spinal anatomy and relative mobility of carnivores lends itself to localized physiological and accessory joint mobilization techniques that are not directly transferable to the equine thoracolumbar spine. Equine spinal ‘manipulation’ as practised by most veterinary physiotherapists is a soft tissue technique based on principles of reflex inhibition. Other techniques, such as pelvic myofascial release/ischial compression provide the horse with an opportunity to use its own strength to push into a barrier provided by the therapist’s hand/body. Forces encountered using such techniques can be quite high, although they are usually developed gradually. Physiotherapists treating large animals therefore need to be physically fit, and be careful that techniques selected are appropriate to their immediate physical capacity. However, many techniques require minimal force, and animals do have some anatomical advantages for efficient therapy technique delivery. Tails provide an excellent lever to apply mechanical forces to the sacrum, including traction and distraction forces. It can also be used to facilitate postural reactions for assessment and treatment (Fig. 9).

Two cases are discussed with a view to illustrating some of the issues mentioned. Both are neurological cases, which although not necessarily the commonest seen, shall hopefully give an example of the varying challenges faced when treating animals.

Case A

**Patient:** 10-year-old uncastrated male miniature pet dachshund.

**History of Present Condition (HPC):** Acute onset hindlimb paralysis. Unable to weight-bear on hindlimbs, loss of bladder and bowel control, deep pain sensation intact.

**Diagnosis:** Mid-thoracic disc prolapse (evident on myelogram).

**Veterinary management:**

- **Surgical:** Decompression surgery within 48 h of onset.
- **Medical:** IV steroids, then oral anti-inflammatory medication (NSAIDs).
- **Nursing:** Manual bladder expression, strict attention to hygiene to prevent skin lesion from lack of urinary control, regular position change to avoid pressure areas.

**Social history:** Lives with retired lady owner (human nursing background) and 2 other dogs. Insured. Owner committed to do everything possible to help dog. Emotional attachment: high. Physical capacity of owner limited in some aspects, e.g. unable to kneel on floor due to knee osteoarthritis.

**Value of animal:** Highly valued ‘family’ member (financial value irrelevant).

**Time since onset when referred for physio:** 3 months.

**Temperament/tolerance of patient:** Has displayed aggression to other dogs, tolerated all veterinary assessment/handling to date with no issues.

Case B

**Animal:** 8-year-old warmblood gelding, affiliated eventer (novice or ‘one star’ level) (note for ed: info on what this means/entails can be obtained from British eventing website—link added below).

**History of present condition** (HPC defined above): Fell in a ditch while hunting. Able to rise and continue, but not jumping well after accident. Progressive deterioration and worsening bilateral hindlimb weakness/proprioceptive/sensory deficit develop over the next hour. Bladder and bowel function unaffected.

**Diagnosis:** Spinal cord injury cranial lumbar spine. Soft tissue injury diagnosed, but unable to rule out fracture as X-ray inappropriate (cost and logistics—would require general anaesthetic and recovery from the same likely to worsen condition).

**Veterinary management:** conservative-oral steroids 48 h, then NSAIDs. Inpatient for 2 weeks, then discharge home for 3 months box rest.

**Social history:** Recent purchase to sell on by professional rider, running busy competition yard. Not insured. Owner concerned for horse’s welfare,
but pragmatic as resources and time need to be directed to other priorities. Physical capacity and skill of owner high.

Value of animal: Estimated £8000 pre-injury.

Time since onset when referred for physio: 2 weeks.

Temperament/tolerance of patient: Not owned/known long enough to predict with certainty, tolerant of procedures/handling to date.

Physiotherapy findings (first contact)

Case A
Observation: Surgical wounds well healed. Wasting of epaxial spinal muscles caudal to mid-thoracic region and all hind limb muscles. Some wearing of nails on both hind feet.

Functional mobility: Independently mobile inside using forelimbs to propel whole body, with hindlimbs trailing passively behind. Unable to stand independently, even if limbs manually placed in correct position. Unable to sit in normal position, requiring maximal assistance for sit to stand transfer.

Pain: No pain response elicited on palpation.

Tone/reflexes/sensation: Increased tone hindlimb flexor and adductor groups. Exaggerated patella reflex bilaterally. No evidence of conscious awareness of hindlimb palpation, or response to touch or vibration. Exaggerated flexor withdrawal response to deep pain stimulus, with conscious awareness.

Range of motion: Hip abduction and extension range reduced due to increased tone. Full range possible on slow sustained passive manual stretch.

Case B
Observation: Very prominent spinous processes of L1-2. Wasting of epaxial muscles most evident caudal to L1 and gluteals bilaterally (see Fig. 10).

Functional mobility: Able to stand independently, but often with unusual hind limb positioning. Very unsteady when turning in box with poor hindlimb control. Unable to stand safely with any limbs manually lifted of the ground.

Pain: Painful response on light palpation of epaxial muscles of caudal thoracic spine to L1, reduced pain response caudal to L1.

Tone/reflexes/sensation: No signs of conscious awareness of forceps skin pinching all regions of both hind limbs. Some resentment of similar skin stimulus along spine, but this response significantly reduced caudal to L1 than cranial. Anal tone and reflex normal.

Range of motion: Unsafe to assess. Horse would be at risk of falling if any limb lifted to passively evaluate range. Given suspicion of fracture, would be unwise to elicit reflexes than result in spinal movement at this stage (Fig. 10).

Figure 10 Case B: Wasting of spinal longissimus and musculature of the hind-quarters. Prominent spinous process of L1/L2 region indicated.

Physiotherapy problems

<table>
<thead>
<tr>
<th>Case A</th>
<th>Case B</th>
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<tbody>
<tr>
<td>Loss of trunk and hindlimb motor control primarily due to spinal cord injury, but likely also secondary disuse atrophy</td>
<td>Pain from sub-acute soft tissue injury with suspicion of bone injury</td>
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<tr>
<td>Hindlimb flexor/adductor increased tone, impairs ROM/normal movement and risk of contracture developing</td>
<td>Loss of hindlimb motor control</td>
</tr>
<tr>
<td>Compensatory movement patterns well learnt/established so more difficult to implement ‘normal movement’</td>
<td>Reduced hindlimb sensation/proprioreception</td>
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<tr>
<td>Risk of skin damage due to loss of sensation/bladder control and compensatory movement strategies</td>
<td>Spinal muscle atrophy could be either due to nerve injury or pain inhibition with secondary disuse less of a factor at 2/52 post-injury</td>
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<tr>
<td>Risk of secondary injury due to poor hindlimb control, also safety of therapist/grooms/handlers needs to be considered</td>
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Treatment aims (common to both cases)

- Optimize conditions for maximal recovery using understood principles of neural plasticity (Dobkin, 1993; Selzer, 1993).
- Prevent disuse atrophy.
- Maximize afferent sensory input in areas of deficit.
- Prevent secondary injury, e.g. use of protective boots/bandages.
- Encourage normal movement patterns wherever possible.

Specific to case A

- Normalize hindlimb tone to prevent contractures and promote normal range of movement and function.

Specific to case B

- Promote resolution of subacute soft tissue injury.
- Provide pain relief.

Goals/plan agreed with owners

Case A

Optimistic: To restore normal function, i.e. for a dog to walk again.

Realistic: To ensure dog has a good quality of life and is free of pain. Compensatory strategies such as a wheeled cart would be considered if optimum goal not achieved.

Case B

Optimistic: To be able to sell as competition horse.

Realistic: Ultimately, the horse needs to be able to be ridden, if only as a pleasure hack. Will give horse 3 months. If no improvement in this time frame will euthanase. If partial improvement, i.e. able to safely go out in a field, will turn out for further 6 months and re-evaluate.

The implications of not having firm evidence of no bony injury were discussed in depth with the owner and referring vet. Should an undiagnosed fracture be present it will be vulnerable if the supporting muscle spasm is relieved and the region mobilized too soon. However, if the horse is not treated for 3 months, disuse atrophy and adhesion formation may impede progress that could otherwise be gained in time for the crucial 3-month re-evaluation. On balance, all parties were in favour of restrained treatment for 6 weeks (giving a stable fracture reasonable time to reach union) and aggressive treatment thereafter. Should at any stage the neurological state of the horse deteriorate, he would be euthanased promptly with no attribution of blame to any party.

Physiotherapy treatment

Case A

- Hydrotherapy—swimming twice per week. Beginning with short duration 1–2 min swims and frequent rest periods, progressing to longer duration (5 min) swim times in half hour session.
- Sensory input to regions of anaesthesia/parasthesia—consisting of massage/stroking/skin rolling/tapping and massage with an electric toothbrush for the vibratory input. Delegated to owner to perform at least twice daily.
- Slow sustained stretch techniques performed in lying to regain hip extension and abduction range. Also performed by owner on regular basis. Facilitation and encouragement of lying postures promoting hip extension/abduction to become part of daily life.
- Protective boots to be worn to protect hind paws when mobilizing outside.
- Regular positioning in normal sitting and standing postures. Facilitation of normal sit to stand transfer. When independent weight-bearing in standing achieved, progress to weight-bearing with one forelimb lifted, or forelimbs on unstable surface such as cushion/wobble board. Also encouraging weight transference through hindlimbs with rhythmic stabilization, tail traction and sway/oscillation.
- Supported mobilizing with hindquarter handheld sling and later using wheelchair cart (see Fig. 11).

Figure 11 Case A: Showing wheeled cart use to aid rehabilitation and functional mobilization.
Case B (2–6 weeks)

- Laser therapy at pain relieving dosage to L1-2 region.
- H-wave at muscle stimulating dosage to caudal longissimus, gluteals and quadriceps.
- Advised incorporating sensory stimulation to areas of anaesthesia/parasthesia into daily stable routine of grooms (methods as per case A). Also to wear protective bandages/boots as frequently as possible.
- Rhythmic stabilizations through pelvis and tail, promoting postural reaction (initially performed by therapist, not delegated until horse more stable and technique safer for handlers).

(After 6 weeks)

- Short walks in-hand, on flat surface with very wide turns, preferably while wearing ‘body wrap’ bandage (see Fig. 12) to promote sensory awareness of hindquarters.
- Progression of all early techniques with increased force/speed.
- Challenging balance by lifting initially single forelimb, then as able single hindlimb.
- Forelimb ROM stretches.
- Hindlimb lifting and circling progressing to ROM stretch as able.
- H-wave at muscle stim and pain relieving settings to L1-2 region, in addition to caudal thoracic, caudal lumbar, gluteals and quadriceps.
- Manual reflex inhibition techniques to areas of longissimus muscle spasm.
- Lumbosacral spinal reflexes used to encourage abdominal activity and flexion/side flexion mobility of spine.

Outcome (to date) Case A

Reduced wasting of trunk and limb musculature. No skin lesions or contractures. Improved proximal trunk control evident by the ability to climb up single steps of 8 in height. Can stand independently for up to 1 min, and owner feels this has contributed to improved bladder control (has not needed to assist bladder expulsion for 6 weeks to date).

Although active movement of hindlimbs can be observed while swimming and in cart this has not transferred to useful hind limb control sufficient for normal walking. Remains perfectly happy, mobilizing with front limb drag technique inside, but enjoys cart outside, and able to keep up with other dogs using this. Also enjoys the attention it brings from onlookers.

Verdict: Realistic goals achieved, owner satisfied, although regrets that therapy was not instigated sooner.

Plan: Ongoing home program, and review as required.

Case B

At the time of writing, this patient has not yet reached 3 months post-injury. He is progressing well with no further muscle wastage and gradual return of normal responses to sensation and reflex tests is progressing in a cranial to caudal and proximal to distal fashion. He has become so ‘fed up’ with confinement that the in-hand exercise has become very exuberant, and may have to be curtailed on safety grounds.

Verdict: Too soon to say, has improved enough to date to achieve the 6 month extension.

Plan: Will be turned out in a field as soon as ground conditions allow, and will be managed with rehabilitative exercises as much as time and resources permit.

Conclusion

Many ACPAT physiotherapists combine animal and human practice and most would agree that their human treatment skills have been enhanced by working with animals, particularly in the areas of observation/gait analysis and manual assessment and treatment skills.

Animal cases can provide unique challenges that test problem-solving skills and creativity, as at present standard treatment regimes have not been validated for all presenting conditions. Hopefully, when the established post-graduate programs of study begin to produce quality research the
scientific evidence base for animal physiotherapy will broaden and strengthen, ultimately enhancing the quality of overall veterinary care.

References


Further information—useful websites:


USA; Animal Physical Therapist Special Interest Group, Orthopaedic Section, APTA, www.orthopt.org/sig-apt.php

Canada; Canadian Horse and Animal Physical Therapists Association, www.animalptcanada.com


Italy; www.idioscuri.com

Ireland; No formalized group. Some ACPAT members work in Ireland and are listed on UK ACPAT website www.veterinaryireland.ie

Further reading (books)


Articles


