

ANIMAL REHABILITATION

SPECIAL INTEREST GROUP

President's Message

Kirk Peck, PT, PhD, CSCS, CCRT

News Briefs:

CSM - The APTA Combined Sections Meeting being held in Indianapolis in early February is fast approaching and the ARSIG has exciting programming planned for those who attend. Lisa Bedenbaugh, PT, CCRP, will present on the topic of, "Designing an Effective Therapeutic Exercise Program for Canine Clients." In addition, the SIG will hold its annual business meeting which is intended to gain in-depth member feedback and discussion. The ARSIG events are scheduled for Saturday, February 7, from 7:00 a.m. - 10:00 a.m. Please mark your calendars for this exciting opportunity to learn and engage in collegial dialogue.

Strategic Planning - In October, Board members and SIG Presidents of the APTA Orthopaedic Section participated in a two-day strategic planning session. The process resulted in a successful revision of the Mission, Vision, and Goals that will guide Section activities and initiatives over the next several years. Two primary foci resulting from the revised plan included an emphasis on the advancement of educational opportunities for members and the promotion of innovative research to enhance Orthopaedic practice. These initiatives are aligned with the goals dedicated to the ARSIG and add significant value and benefit to being a Section member.

State Legislative Alerts:

I continue to receive inquiries from physical therapists regarding the legalities of animal rehabilitation in various state jurisdictions. Although I am pleased to learn that a few states are contemplating a change in practice laws to enable PTs and PTAs to practice on animals, the number of jurisdictions getting "actively" engaged in the process remains far too limited.

In an ideal world, all 50 states would have at least some form of legal language to support animal rehabilitation as part of PT scope of practice. Although this reality remains far into the future, achieving such as a worthy goal will only occur if states begin to take action now as opposed to ignoring a growing number of therapists who wish to expand their practice. The simple fact remains, however, if PTs and PTAs wish to practice on animals then laws need to be changed to publically and legally recognize the realities of an evolving profession. In support of member involvement, I offer the following Q&A section below to highlight a few additional issues that routinely surface in my communications with colleagues.

Common Questions Regarding PT Scope of Practice:

Since being elected President of the ARSIG, I have received multiple inquiries regarding the legal practice of animal rehab around the country. Therefore, to alleviate a need for constant repetition I have decided to share a few insights from past questions below:

1. **Question:** "I cannot find explicit language in the PT scope of practice referencing non-veterinarians treating animals so does that mean it is legal for a PT to practice on animals in my state?"

Answer: In short, a PT or PTA is practicing "at risk" when treating animals without explicit legal scope of practice language. Crossing the human threshold to begin treating animals is relatively new territory for the profession of physical therapy and PT practice laws that were originally codified by state legislatures were not intended to be applied to the animal kingdom. Therefore, it is not prudent to automatically interpret old laws as if they apply to present day practice.

2. **Question:** "Does my human PT malpractice liability insurance plan cover me when treating animals?"

Answer: No, unfortunately the health provider insurance industry has not caught up with the fact that many therapists are in the business of treating animals as part of PT practice. However, as states begin to legalize animal rehab in either PT or Veterinary laws then insurance companies will hopefully take a more serious look at their policies. Stevan Allen, VP of the ARSIG, has been lobbying a few insurance companies to consider offering coverage for PTs treating animals. His efforts successfully influenced HPSO to increase the amount of coverage allowed for canine malpractice insurance. Policies for equine rehab remain challenging however as the risk-benefit ratio is much greater in equine vs. canine practice.

3. **Question:** "Why are states that currently have language allowing PTs to treat animals do so by requiring veterinary referral or medical clearance? Why can't PTs just treat by direct access since all 50 states now have direct access language?"

Answer: The answer is simple, and yet complex... it all relates to the concept of "evolution" within the practice of physical therapy. The PT profession is essentially starting over in many areas of professional negotiations when dealing with veterinarians vs. health providers in human medicine. Therefore, I offer the following two explanations to help answer the present question.

- a) History is clear on this point, veterinarians have only recently been confronted with the idea that non-veterinarians have a seat at the table in treating animals. This is a very new paradigm for some veterinarians, so the idea of PTs simply jumping on board to provide animal care and then demanding direct access rights is somewhat preposterous. Just consider how many years it has taken to demonstrate educational competencies in human practice to acquire direct access privileges. Simply put, there is a vast difference in the evolution of PT practice on humans vs. the practice on animals. For example, since animal rehabilitation is not an entry-level skill, issues such as educational competencies and safety in practice must be addressed to ensure PTs are qualified to cross species.

- b) A very different and unique paradigm of practice has occurred in animal rehab that simply does not exist in human medicine. Veterinarians, who are essentially the MDs of the animal kingdom, are themselves getting educated to perform rehab services on animals. These services include the use of physical agent modalities, hands on skills such as manual therapy, and instruction in therapeutic exercise. In contrast, human physicians are not applying to PT schools to practice human rehabilitation. With that said it should not require a great imagination to recognize why some veterinarians are reluctant to share in the care of animals with non-veterinarians, especially accepting the idea of allowing others to have direct access. This attitude will hopefully change over time as PTs continue to publically demonstrate excellence in quality of animal care.

California Veterinary Medical Board:

The California Veterinary Medical Board (VMB) public hearing on the proposed regulatory language to mandate “direct supervision” over all non-vets treating animals has once again been postponed. The latest deadline to hold a hearing in October 2014 came and went so the next option for a scheduled date is January 2015. As a friendly reminder, the California proposal is a significant concern to the ARSIG and to all PTs, now and in the future, who practice on animals.

ARSIG Logo:

Since mentioning the importance of developing an ARSIG logo in the last newsletter I have received absolutely no responses from members as to possible designs. Therefore, I once again encourage any SIG member who has an imaginative mind to consider proposing a marketable idea for a creative SIG logo. Adding a personalized logo to letters of public correspondence, brochures, and other targeted materials will add overall credibility and integrity to the ARSIG.

Call for OPTP Submissions:

To promote, educate, and advance the practice of animal rehabilitation, I encourage members to submit articles related to clinical pearls, critiques of recently published articles, unique case studies, or abstracts of primary research. Please contact the President or Vice President of the ARSIG if interested in submitting an article for review.

Happy Winter Season!!

Contact: Kirk Peck (President ARSIG): (402) 280-5633 Office;
Email: kpeck@creighton.edu



Available ISC

Stevan Allen, MAPT, CCRT
VP, ARSIG

The ARSIG, in conjunction with the Orthopaedic Section, is pleased to announce the newest addition to our library of Independent Study Courses. This ISC is comprised of two different monographs. The first, entitled “PT Evaluation of the Animal Rehab Patient” was authored by Lisa Bedenbaugh, PT, CCRP, and Evelyn Orenbuch, DVM, CAVCA, CCRT. Author, Michael R. Lappin, DVM, PhD, DACVIM, authored the monograph titled, “Zoonosis and Animal Rehabilitation,” completes the set. The course description of these two monographs presents animal rehabilitation for the canine population. The importance of using clinical reasoning skills to guide the assessment for each animal patient is emphasized, as is a team approach to rehabilitation of the animal patient. A companion monograph covers recognition of the clinical signs of disease in humans and animals that are associated with zoonotic diseases. Implementation of proper infection control and intervention is the focus. Case studies are provided for each of the monographs. We are confident that these two monographs will be an excellent addition to your reference library. You can order both on the Orthopaedic Section Website, at www.orthopt.org

The Importance of Core Strengthening (and Manual Therapy of the Spine and Pelvis) for the Long Term Benefit of the Canine Athlete Following Tibial Plateau Leveling Osteotomy: A Case Study

Karen Atlas, MPT, CCRT

PAST MEDICAL HISTORY

Skye is a 7-year-old male neutered Golden Retriever and a well-accomplished obedience, rally, agility, and flyball athlete. He originally presented to rehabilitation in May 2012 after undergoing a tibial plateau leveling osteotomy (TPLO) for surgical stabilization of a torn cranial cruciate ligament. After undergoing significant therapeutic interventions that included cold laser therapy, underwater treadmill, land-based exercises focusing on limb and core strengthening, and manual therapy, Skye returned to function, but continued to demonstrate unloading of the affected limb and palpable tenderness at the pes anserine. In October 2012, the TPLO hardware was removed as the surgeon suspected plate irritation as the cause for the continued unloading of the affected limb. After plate removal and additional rehabilitation, the lameness subsided and Skye returned to competition.

In February 2014, Skye came up lame on the same limb after an agility trial. Though no significant findings were identified by the referring veterinarian, it was recommended that Skye rest for 2 weeks and began a round of anti-inflammato-

ries. Skye's lameness persisted, so he was referred to the board certified surgeon who diagnosed bilateral sciatic nerve pain or cauda equina syndrome and was placed on gabapentin and further activity restriction. He was also referred back to a physical therapist certified in canine rehabilitation.

PT PHYSICAL EVALUATION

In late March 2014, an evaluation was performed by the canine rehab-trained physical therapist and the following significant findings were observed: (1) gait at a walk: 2/4 lameness in left pelvic limb (LPL off loaded and slightly externally rotated), (2) palpable tenderness in the following areas: left pes anserine, bilateral iliopsoas (left greater than right), bilateral sacrotuberous ligament, lumbosacral junction, and multilevel zygapophyseal and costovertebral joints of the thoracic spine, (3) pelvic asymmetry was noted with a dorsal and caudally positioned ilium on the left, as compared to the right, and moderately restricted mobility of the sacroiliac joints bilaterally (left worse than right), and (4) positive modified left straight leg raise indicating sciatic involvement.

INTERVENTION

Skye received a variety of treatments to meet his specific needs to initially reduce pain and inflammation including manual therapy techniques (to spine and pelvis, ie, grade II and III zygapophyseal and costovertebral joint mobilization, tail traction, sciatic nerve dural mobilizations, and soft tissue mobilizations including trigger point release to the iliopsoas and epaxial muscles), cold laser therapy (class 3b), and ultrasound to the pes anserine and distal hamstring tendons. He was kept conditioned in a low impact environment using the underwater treadmill.

FOLLOW-UP VISITS

Once Skye's acute pain was successfully managed with the above interventions, his treatment plan was modified to better meet his long-term needs of improved postural alignment and more intense core strengthening to enable him to safely return to sport. Employing grade III and IV joint mobilizations, the sacroiliac joints were effectively mobilized to correct Skye's pelvic alignment. Achieving a properly balanced pelvis and adequately mobilized zygapophyseal and costovertebral joints were critical to Skye's recovery since he had been compensating for the left-sided TPLO for so long.

The specific manual techniques implemented to achieve improved postural alignment were as follows: (1) unilateral dorso-ventral pressures of the affected zygapophyseal joints, (2) transverse pressures using the spinous process for the restricted zygapophyseal joints, (3) distraction and rotational mobilization techniques for the costovertebral joints, (4) cranial/caudal translations for the SI joints, (5) dorsal/ventral rotations SI joints.

The above techniques were employed as described by Laurie Edge-Hughes, PT, in the Basic and Advanced Manual Therapy for the canine spine book and continuing education course, respectively.

Exercises were advanced to work both on static and dynamic core strength. Static strengthening exercises included thoracic limbs on a BOSU ball with pelvic limbs first on solid ground with head perturbations (cookie to hip to facilitate weight shift-

ing), then progressing to the pelvic limbs on an air disc, and finally to a 3 legged stand with the affected limb on the air disc and thoracic limbs on a more challenging air-filled donut (Figure 1).

To incorporate more dynamic core strength, Skye worked on a land treadmill with his thoracic limbs balancing on a BOSU ball. Once he mastered that, he was challenged more with simultaneous rhythmic stabilization techniques to the hind end (Figure 2).

With the above core strengthening exercises, an ace-wrap was used around Skye's trunk to provide proprioceptive input to his lumbar spine and abdominals. Concurrent manual tapping to the abdominals was done to elicit greater awareness to contract those muscles specifically. Following a successful comprehensive rehabilitation program, Skye fully returned to sport without limitation (Figure 3).



Figure 1. Skye working on static core strengthening exercises. Incorporating manual tapping to the abdominals further facilitates muscle contractions.



Figure 2. Skye working on dynamic balance on the land treadmill. He is required to balance on the BOSU ball with his thoracic limbs while walking on the treadmill. The proprioceptive band along with manual tapping of the abdominals helps to facilitate core strength.

CLINICAL SIGNIFICANCE

As physical therapists, we are accustomed to treating the body as a whole. A stifle injury does not just require stifle rehab. Treatment goals not only need to address short-term functional use of the affected limb, but the long term functional use of the

entire body. For athletes, the desire to return to sport runs deep, and your rehab program needs to highlight exercises that take into account the repetitive stresses on the whole body which requires and relies on a strong core.



Figure 3. Skye successfully returns to competition.

CONCLUSION

Pelvic and spinal alignment and core motor control are important aspects to consider during the rehabilitation of the postoperative TPLO. Even small compensations at the stifle can lead to significant problems in the spine that can severely affect performance and long term postural health in a canine athlete.

RESOURCES

1. Edge-Hughes L. *Basic Manual Assessment and Treatment of the Canine Axial Skeleton*. Published by Four Leg Rehab Inc. Copyright 2012.
2. Edge-Hughes L. *Advanced Manual Therapy for the Canine Spine (Course Manual)*. Copyright 2014.

HAVE YOU EVER THOUGHT ABOUT ADDING CANINE REHABILITATION TO YOUR PHYSICAL THERAPY SKILLS?



The physical therapists in our classes tell us that working with four-legged companions is both fun and rewarding.

Explore opportunities in this exciting field at the Canine Rehabilitation Institute.

Take advantage of our:

- World-renowned faculty
- Certification programs for physical therapy and veterinary professionals
- Small classes and hands-on learning
- Continuing education

"I am a changed PT since taking the CRI course. It was an experience that I will use every day in practice and will always remember!"
Nancy Keyasko, MPT, CCRT, Stone Ridge, New York



LEARN FROM THE BEST IN THE BUSINESS.
www.caninerehabinstitute.com



**Animal Rehabilitation
Special Interest Group,
Orthopaedic Section, APTA, Inc.**

Clipboard Order Form

Date	Description	Quantity	Price Each	Extended Price	Total
	ARSIG Clipboard		\$25.00		
				If WI resident, add 5.5% tax	
				Shipping (\$7.00)	\$7.00
				TOTAL:	

Name: _____ Phone: _____

Address: _____ Fax: _____

City, State, Zip: _____ E-mail: _____

Credit Card Type: _____ #: _____ Exp: _____

Signature: _____