

## PRESIDENT'S MESSAGE

We just wrapped up CSM 2024 in Boston and I want you all to mark your calendars for CSM 2025 in Houston from February 13th through the 15th! CSM is always a great opportunity to network with many individuals, and the networking (besides the animal PT lecture of course) is always my favorite part of it. It was great to host our SIG Business Meeting in-person once again (first time back in person since COVID), and I also wanted to recognize Carrie Adrian for her great presentation this year on "Neuromuscular Control of the Canine Stifle and the Biomechanics Behind Orthotic Interventions."

I would also like to continue to bring attention to California, and we provided an update on that during our Business Meeting at CSM. Last year, AB 814 passed the Assembly in California with very favorable voting margins. The next step for AB 814 now is to make its way through the State Senate, and as of now it is expected to be heard in its first committee earlier in the summer. That is all very exciting; however, as you can imagine it costs money to fight legislative battles, quite a bit of money in fact, and although our SIG has worked with Karen Atlas (who runs the coalition and has been spearheading these efforts) to help secure as many funds as we can for her coalition, we could use your help! Please follow the California Animal Physical Therapy Coalition page on social media and go to their website to stay up to date, participate in Call-to-Action Initiatives, and to make any donation. All donations are greatly appreciated and 100% of the funds goes toward the legislative efforts for AB 814.

http://www.caapt.org

Thank you, Francisco Maia, PT, DPT, CCRT Animal PT SIG President fmaia@orthopt.org

## ASSISTIVE DEVICES IN ANIMAL PHYSICAL THERAPY

Jenny Moe, PT, MS, DPT, CCRT, APT

Physical therapists are the go-to professionals for prescribing assistive devices when an individual is struggling with impaired mobility or function. Assistive devices help bridge the gap to aid an individual in regaining their independence and maximize quality of life. They may be a temporary aid, or an adaptation for a long term lifestyle change, especially in progressive conditions. Physical therapists specializing in animal physical therapy or rehabilitation can apply this wide base of knowledge to our animal patients and help to educate both their caregivers as well as the entire medical team.

Our pets are living longer and fuller lives now, more than ever before. A longer life span often comes with the additional challenges of impaired strength, mobility, and comfort due to conditions such as osteoarthritis (OA), intervertebral disc disease (IVDD), hip and elbow dysplasia, cancer, and generalized weakness due to aging. Other pets may be born with congenital anomalies or impairments that have caused impaired function. And, of course, there is also the group to be considered who have experienced trauma or injury leading to impaired function. All of these populations may have a need for assistance. Traditionally this has been limited to slings or maybe a harness. Often the animal's life span may be shortened due to the lack of knowledge about all of the options that could help maximize function and reduce pain. There are now more options than ever to offer aid for these animals.

Assistive devices for pets may include simple adaptations such as a harness to allow a person to facilitate transitions and movement with greater ease. This could be anything from a standard walking or hiking harness to a more comprehensive one such as the Help 'Em Up Harness. Having something to hold allows the rehab team to educate caregivers how to best facilitate movement through natural movement patterns, instead of relying on lifting. It also is important to take into consideration the body mechanics of the caregivers and teach them proper techniques to avoid injury themselves. Another category of devices would be boots or traction aids. Care must be taken to consider whether an animal has proprioceptive deficits, as adding boots can block sensory input and lead to worsening of ataxia or knuckling. There are a multitude of options on the market now, so choosing the appropriate device for the patient's needs is crucial. Other wearable devices that are common may be neoprene wraps, body wraps such as a Thundershirt, K9Align, or even a back brace. We can also consider ramps and stairs as assistive devices.

The most common item that comes to mind as an assistive device for animals is the wheelchair, or cart. It is unfortunately a widely believed misconception that carts are for animals that are paralyzed or have run out of options. However, if we think of carts as assistive devices, it vastly expands the possibilities of their application in animal physical therapy. We know an assistive device is any device helping to improve independence performing activities of daily living. For dogs, their primary activity of daily living is mobility. Depending on the dog or animal's level of function, a cart can serve the same purpose that a cane or walker might for a human if they are ambulatory; or more like a wheelchair if there is a higher degree of mobility impairment.

Consider a person who has had an orthopedic surgery, or any major surgery - is our first move to put them in a wheelchair? Usually not! Physical therapy is often prescribed, and the individual is taught to use an appropriate assistive device that helps them achieve modified independence, as they work their way back to full independence. If that is not a feasible goal, we support them with the devices they need to maximize functional mobility to achieve modified independence.

Now consider a dog who is struggling to walk and requires assistance. It could be a senior dog who is slowing down from potentially multiple systems (orthopedic, neurological, metabolic, etc)

and has a hard time on their daily walks, or a younger dog who is recovering from an injury or surgery. Along with an appropriate harness, wheels may speed recovery and even improve strength in both situations. It may be a temporary aid for the younger dog, and for the older dog, just used for their walks. Wheels can help even out weight distribution and ease compensatory issues, making the animal's movement more efficient and less painful. A full support cart along with early use of orthotics can help to minimize joint breakdown in conditions such as immune mediated polyarthritis or Cushing's disease. The assistive devices are selected to only provide the minimal level of support needed, so they will not feed into a negative loop of atrophy and declining function. Quite the contrary, they may help to improve function outside of the wheels and improve overall quality of life.

Let's take a look at a couple examples of cases where wheels might be helpful, aside from the more obvious cases where a pet is dealing with paralysis.

- Oreo is a 13 year-old hound mix who was slowing down on his walks. He had surgery for lumbosacral stabilization and physical rehabilitation, but he's overall pretty healthy. His mom reports he is slower and not going as far on his usual walks. He goes to physical rehabilitation weekly to stay in shape. A rear wheel cart was introduced just for the longer walks initially. Oreo was still bearing full weight on the hind limbs, but a little weight was relieved from his front legs so he was more balanced. He was able to return to his normal longer walks and did not seem as tired or stiff afterwards. As he got older, he used the carts for all walks eventually, but was still able to walk independently without the wheels. He was able to go for walks on the beach, whereas it was getting to be too difficult for him without the wheels due to bladder cancer. Neoprene carpal wraps were also added for walks with and without the cart to support the front limbs.
- Tikka is a senior chihuahua who has a history of medial patellar luxation and cruciate tears in both stifles. She is having a harder time walking on her own and isn't able to go much further than walking around the house. Sometimes her legs give out. A rear wheel cart was recommended by her physical rehab therapist. Tikka was able to walk with taller posture and go further, going out for short walks to help her build strength in addition to her physical rehab sessions.



Oreo at Ocian Beach, San Fransisco



Tikka at The Whole Pet Vet in Los Gatos, CA

There are several companies out there to consider, each having some benefits for some cases over others. The different designs can benefit different populations and circumstances, so it is important to research all and determine which suits a patient's needs as well as the caregiver's best.

As physical therapists, we provide a unique skill set in movement and gait analysis, knowledge of assistive devices and their function, and expertise in breaking down tasks and instructing them to help get our patients back to living their fullest lives. In collaboration with all of the members of the veterinary community, we can together provide a well-rounded team to help animals thrive. We offer our particular expertise with assistive devices to help educate the veterinary community and pet parents that there are many options available to help improve quality of life.

