

Passive Range of Motion Therapy

Range of motion refers to the range (measured in degrees of a circle) through which a joint can be flexed and extended. Flexion refers to the bending of a joint, while extension refers to the straightening of a joint. Trauma, surgery, arthritis and lack of conditioning can all lead to decreased range of motion within joints. This means that the joint is unable to flex or extend as far as it should, or is basically less limber. Physical therapy exercises can be performed to combat this loss of motion, increasing joint mobility and function. Your Veterinarian can outline a physical therapy protocol which addresses your pet's specific needs.

One therapy that may be recommended is Passive Range of Motion Exercise. These exercises are designed to work each joint through its normal range of motion to increase flexibility and function. This therapy is especially useful in patients who have undergone orthopedic or spinal surgery. Patients are typically positioned on their side, while each individual joint is flexed and extended. Often, it is recommended that passive range of motion exercises be performed in warm water for spinal patients. The water helps to relax and stimulate the muscles of patients with paresis or paralysis.

Always follow your Veterinarians instructions for performing passive range of motion exercises. They will instruct you as to which joints should have therapy, how many repetitions should be performed on each joint and how often therapy should be performed. The main thing to remember is to perform the exercises slowly and with steady pressure. NEVER force a joint, as this can cause pain and injury to the patient.



Hours of Operation

Monday 8am - 8pm

Tuesday 8am - 8pm

Wednesday 8am - 8pm
6:30am Early Morning
Check-In

Thursday 8am - 8pm

Saturday 8am - 3pm

Friday 8am - 5pm

Sunday Closed

For more Information or to Schedule a Consultation,
please call: (920) 498-2808 or 800-236-2808.

www.packerlandvet.com



PASSIVE RANGE OF MOTION THERAPY



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Passive range of motion therapy is most commonly performed on the front and/or rear legs. The joints which compromise the front limbs are the carpus (wrist), elbow and shoulder. The joints of the rear limbs are the hock (ankle), stifle (knee) and hip. We first start range of motion therapy by warm compressing and massaging the limb to be worked. This will help loosen the muscles and supportive structures and prevent strain injuries.

Warm compress the area using a towel that has been run under hot water. Wring out the excess water and wrap the towel around the area to be worked. It is recommended to warm compress for 10-15 minutes prior to therapy. Spinal patients who have been instructed to perform the exercises in water need not warm compress, but should perform the massage while in the tub of warm water. Start the massage at the toes using a firm, kneading motion slowly massaging your way up the limb. If working a front limb, also massage the muscles of the shoulder, base of the neck and along the spine where it is attached to the ribcage. Rear limb massage should also start at the toes and continue up the limb, incorporating the muscles of the rump and the muscles along the spine up to the base of the ribcage.

Once the massaging is complete, we can begin the flexion and extension exercises. It is typically easiest to start with the lower joint first – wrist for a front limb, ankle for a rear limb. Begin by extending, or straightening the joint until it reaches its furthest point and stops. Then, placing the palm of your hand on the pad of the foot, flex (bend) the joint until it also reaches its furthest point and stops. Patients may be resistant to these exercises at first, and may push against you flexing or extending the joint. If they push against you, you may need to increase the pressure which you are applying to perform the exercise. Please be cognizant of how much of the reduction in motion is because the pet is pushing against you, and how much is due to reduced joint mobility. Remember to never force a joint. Once you have completely flexed the joint, return the joint to the extended position. This is considered “one rep.” Most often, we will recommend each joint is worked for twelve reps. Once you have finished all the reps on the lowest joint, continue to work your way up the leg to the other joints.

In addition to individual joint flexion and extension exercises, we also want to work the joints of the limb as an entire working unit. This is accomplished by performing an exercise we call “the bicycle kick.” This exercise is performed by grasping the foot and moving the limb in a circular motion as if the patient were riding a bicycle. The motion of this exercise should be exaggerated slightly so that we are reaching the maximum flexion and extension points of the joints. We often will recommend that this exercise be performed for twelve reps, or revolutions.

After completion of the passive range of motion exercises, we recommend icing the limb to help prevent swelling. This is most important for patients that have undergone orthopedic surgery. Start by icing the limb for fifteen minutes, then remove the ice for fifteen minutes, then ice once more for fifteen minutes. It is recommended that passive range of motion exercises be performed two to four times daily, depending upon your pet’s individual needs.

Forelimb Passive Range of Motion



Normal forelimb position



Wrist/Carpus extension



Wrist/Carpus flexion



Elbow extension



Elbow flexion



Shoulder extension



Shoulder flexion

Hindlimb Passive Range of Motion



Normal hindlimb position



Ankle/Hock extension



Ankle/Hock flexion



Knee/Stifle extension



Knee/Stifle flexion



Hip extension



Hip flexion