

CONSERVATIVE MANAGEMENT OF PATELLAR LUXATION PROTOCOL

The goals for maintaining normal tracking of the patella and support for the knee will be to strengthen the quadriceps & gluteal muscle groups, to maintain flexibility of the hip flexors, reduce any pain if present, address core stability (abdominals & such), and address nails that might be too long. This protocol may not reverse your dog's patellar instability, but could improve function and prevent deterioration.



1. Pain Management: Your rehab therapist / practitioner will establish if your dog has pain associated with his/her patellar luxation. If so, then therapies such as TENS, electrical muscle stimulation, acupuncture, laser or ultrasound may be prescribed – especially before exercise. If there is pain and your practitioner has prescribed home exercises, then hot or cold could be used for 5 minutes before exercising.



2. Gluteal Strengthening:

- Shorthaired dogs may be prescribed the use of a strip of elasticated tape (i.e. kinesiology tape) along the gluteal muscles when going out for walks. Longhaired dogs may be prescribed the use of a hair elastic to 'pull' on the hair over the gluteals when going out for walks.
- Vigorously, repeatedly tap the gluteal muscles on one side (or use of electrical muscle stimulation) prior to and while slowly sliding the opposite back leg off the ground. Hold the leg off the ground for only 2 – 3 seconds, replace and begin again. Tap firmly enough to activate the gluteals and prevent a drop in the pelvis. Do this 10 x per affected leg.



3. Quadriceps & Overall Leg Strengthening:



- ¼-range sit to stand exercise: This exercise is best accomplished with the owner at the side of the dog. Back the dog up to an object that is about ½ the height of the dog. Use one hand to keep the rear feet in this position, and the other to hold a treat (or container of peanut butter or something similar), and ask the dog to sit and then stand repeatedly.



- Progression: Full-range sit to stand exercise on any flat surface. Do 10 repetitions, every day if able.



- Progression: Full-range sit to stand exercise on an incline (i.e. facing up-hill). Do 10 repetitions, every day if able.



- 3-Legged Squats: Using two blocks or boxes, or stools (about elbow height), place the two front feet on one block and one rear foot on the other block, while leaving one rear leg on the ground. Now slowly take the 'grounded leg' off the ground by sliding it backwards until it is not in contact with the floor anymore. This should make the dog straighten the rear leg that is on the block. Then place your hand UNDER the foot you slid off the ground, or grasp it around the hock, push the dog's rear end towards the airborne foot and slowly lower that foot to the ground again. Do 10 reps on each leg. 2 - 3 times per week.





- **Step Ups:** Place the dog's front feet up on a platform (about elbow height to start, but no more than shoulder height, and a size that the dog's whole body can fit onto). Then place one rear foot up on the platform. Now encourage the dog to 'get up' onto the platform – perhaps enticed by a cookie or a toy. Repeat 5 times for each leg, once a day or about 3 x / week.



- **Hill walking:** When leash walking, find some hills to walk up. Low-grade incline to begin with and progress to a steeper hill as your dog gains strength. Do one to two walks up and down the hill per walk.

4. Core Stability



- **Diagonal -Leg standing:** Starting with the dog standing on a stable surface (a progression would be to do this on an unstable surface), lift one hind leg and its diagonal front leg off the ground. Easier is to do this with both legs lifting and held near to the dog's body. Harder is to lift the legs and hold them away from the body. Hold for about 10 seconds if able, and repeat 5 - 10 times on each diagonal pair. 2 - 3 x / week or more.



- **Standing on inflated physio ball, peanut, egg, donut, or other unstable surface.** Have the dog just balance while standing, or sitting, or doing a 3-leg stand or diagonal leg stand. For safety, put the ball up against a wall and brace it there with your legs. Have your hands near the dog to spot them if they lose balance and/or begin to fall. Balance for 3 - 5+ minutes per session. 2 - 3 x / week or more.



- **Belly Wrap:** Use a piece of theraband, theratubing, a tensor bandage or Ace bandage, and wrap it snugly around the dog's waist. Have this on for the first 5 minutes of your dog's walk or other exercises.

5. Soft tissue work: Your therapist / practitioner may elect to do some massage, stretching or myofascial release to your dogs hip flexor muscles. He or she may also prescribe stretching as follows:



- Iliopsoas stretch: Extend the hip. Hold the stretch for 15 – 30 seconds. Rest and repeat once more.



- Sartorius stretch: Bend the knee, and then extend the hip. Hold the stretch for 15 – 30 seconds. Rest and repeat once more.



6. Nail & Foot Care: Proper footing is important for proper leg position and subsequently proper muscle use.

- Be sure to keep the hair on the BOTTOM of your dog's foot trimmed so that it does not extend much past the pads on the bottom of the foot.
- Shorten your dog's nails by trimming them every 2 weeks. Have your therapist / practitioner, vet, or groomer show you how to do this to avoid cutting your dog's 'quick' and to gradually achieve a shorter and shorter nail over time. A good video reference can be found at <https://youtu.be/MM4HQDb1Ef0> (or do a search of YouTube for "Dog Toenail Trimming Susan Garrett").