## POST-OPERATIVE FEMORAL HEAD EXCISION PROTOCOL

## TREATMENT TECHNIQUES:

Treatment can and should be started as soon as possible following the surgery.

*Joint Compressions*: Compression through the stifle (knee) and tarsus (ankle) by placing one hand above the knee and the other hand below the ankle. Push these two together. No motion occurs at the joints; it is as if you were trying to compress the lower leg bone. This helps the knee and ankle with developing extra senses to help take over awareness of the leg now that the hip is unable to do this task.

Range of Motion: put the joint through the following key motions: Utilize flexion, EXTENSION, & abduction. (WITHIN PAIN TOLERANCE, but some discomfort is allowed). Do each movement approximately 3 times per session. A good (tricky) way to get hip extension is to either hold the dog off the ground but allow his/her toes to touch the floor (if the dog is small enough). Alternately, with a bigger dog, you can sit on step # 4 and invite the dog to come up to you with his/her front paws on stair # 3 (or higher), while keeping his/her back feet on the floor – give lots of love, praise, or treats to encourage your dog to stretch out in this position.

*PNF (Proprioceptive Neuromuscular Facilitation):* moving the limb in a functional movement pattern (usually in side-lying). For dogs this is a running motion of the limb (i.e. cycling but more extended as compared to riding a bike). Perform this action 10 to 20 times (or as tolerated) per session.

## Active Exercise:

- Swimming / Underwater Treadmill: Small dogs can swim or walk in a full bath tub or hot tub (keep the temperature around lukewarm). Larger dogs can swim in lakes or streams when or if able.
- Walking up and down small hills. Up hill especially will focus the use of the hind limbs. Start with very gradual slopes.
- Slow walking. Slow walking will force the dog to use the affected limb more. To create more of a challenge, walk the animal in snow, sand or tall grass to create a necessity for high stepping. Walk slowly up hills and zigzag down the hill.

*Specific Exercises*: (A therapist can give you specific instruction in the specific exercise(s) suitable for your individual animal given its individual capability and needs)

- Cross-Leg Standing. Lift the dog's good hind limb and ITs opposite front limb off the ground to balance.
- 2-leg standing. Support the torso and lift the front legs off the ground.
- Hopping exercise. Lift the dog's torso slightly off the ground, now displace your dog in a backwards diagonal direction, towards the surgical leg. Initiate just a few hops.
- Low wheel-barrowing / dancing: lift the torso and front legs off the ground (just slightly) and wheelbarrow the animal forwards and backwards (not too fast).
- Hemi-walking. Position yourself on the 'good' side of the animal. Lift up this sides' front and hind limbs, now displace your dog away from you (i.e. push into him/her). The dog should move the legs on the other side one at a time outwards (i.e. walking sideways).
- Physioball exercise. If you have access to a ball of the appropriate size, you can lift your dogs' torso onto the ball and then rock the dog on the ball diagonally toward the affected limb.
- Put a bootie or plastic bag on the 'good' hind leg, to force the use of the affected leg. Go for a walk this way.
- Stepping obstacle course. Set up an obstacle course that requires your dog to step over things (i.e. a broom, mop, rolled towel, etc). Place the obstacles at uneven intervals.

## Rehabilitation

- A Therapist should explain, demonstrate and observe the use of any of the treatments and exercises above.
- Electrical Muscle Stimulation: To the Gluteals, Quadriceps &/or Hamstrings.
- Ultrasound and / or Laser: to reduce inflammation, stimulate healing, and aid in pain relief.