
Stifle Region (Distal Femur to Hock)

Rehabilitation Following Stifle (Knee)/Distal Femoral Surgery and Trauma

Recovery following knee surgery may take 12 weeks or more. For the first 10 weeks, your dog should be confined to the house, in a crate or small area that allows it to turn around and lay down comfortably, and restricted to brief leash walks to allow it to urinate and defecate several times a day. Your dog should not run, jump or have unobserved exercise during this initial ten week period. Please follow the steps listed below.

Week 1*

- Apply an ice pack to the knee for 10-15 minutes, four times a day for the first 24 to 36 hours following surgery or trauma. (An ice slurry can be made by mixing two parts isopropyl alcohol to one part water in a zip lock bag and freezing. Keep the slurry in the freezer except when it is in use.) Place a towel between the skin and ice pack for comfort.
- When the swelling and redness have resolved, begin to apply a warm compress (a damp towel warmed in water) to the knee for 10-15 minutes, three times a day before performing 10 slow repetitions of gentle *flexion* and *extension* of the knee through a full range of motion. (**Figures 21-22 and Videos 13**)
- After the third day, begin slow leash walks of less than 10 minutes in duration, three times a day. Use the short leash walks outdoors to allow your dog to urinate and defecate.

Weeks 2 and 3*

- Apply the warm compress and continue *flexion* and *extension* of the knee as described above. Range of motion exercises may be discontinued when your dog begins bearing weight on the limb when walking.
- Increase the duration of the slow leash walks to 10-20 minutes in duration, three times a day.
- At the end of week two, your dog should be reexamined by your veterinarian for suture removal if present and evaluation of limb usage (range of motion, limb size and weight bearing).

Weeks 4* and 5

- Increase the duration of the slow leash walks to 20-30 minutes, 2 to 3 times a day.
- Have your dog *circle* clockwise and then counterclockwise or walk a *slalom course*, 2 to 3 times a day. (**Figures 32-33 and Videos 22-23**)
- Have your dog *sit and stand* for 10-15 repetitions, 2-3 times a day. (**Figure 42-43 and Video 32**)

Weeks 6-10

- At the end of week six, your dog should be reexamined by your veterinarian for evaluation of limb usage (range of motion, limb size and weight bearing).
- Increase the duration of the slow leash walks to 30-40 minutes a day. The pace should be slow enough to ensure full weight bearing of the affected limb.
- Have your dog slowly walk up a moderate *hill* of at least 25 yards (meters) in length. Repeat 2-5 times, 2-3 times daily. (**Figures 45 and Video 34**)
- Have your dog slowly climb a flight of *stairs* 5-10 times, twice a day. (**Figures 46 and Video 35**)

Weeks 10-12

- Continue having your dog slowly walk up a moderate *hill* of at least 25 yards (meters) in length and slowly climb a flight of *stairs* 5-10 times, twice a day as described above.
- Healing should be complete and your dog should return to normal activity by the 12th week.

Remember: If indicated, weight loss will hasten recovery.

***NSAIDs and adjunctive analgesics** are often necessary to provide pain management for the first four weeks following surgery to increase patient comfort and compliance during the therapeutic exercises (discontinue if vomiting occurs).

Rear Limb

Stifle (knee) Flexion/Extension- (Figures 21 and 22 and Video 13) These maneuvers are designed to stretch flexor and extensor muscles of the stifle while increasing joint range of motion.

With the dog lying on its side with the affected limb up, bend the stifle moving the hock (ankle) toward the base of the tail for flexion. For extension, place one hand in front of the thigh to stabilize the upper limb and move the leg below the stifle forward straightening the stifle. The goal is slow, controlled movement with slight pressure at the end of the full extent of joint movement. This exercise is repeated 3-5 times, initially 2-3 times daily. The limb is held at the end positions for 2-3 seconds.



Figure 21



Figure 22



Video 13

Videos are available at www.bluespringsanimalhospital.com/library/videos

Please call Blue Springs Animal Hospital & Pet Resort at 816-229-1544 with any questions or concerns.

INSTRUCTIONS

REPEAT 3-5 TIMES, 2-3 TIMES DAILY.

HOLD AT END POSITIONS 2-3 SECONDS

Circles- (Figures 32 and Videos 22) Walk the dog in a circle (cones or obstacles can be used to outline your course). Start with 10-15' diameter circles and progress toward 3-5' diameter circles depending on the size of the dog. Smaller dogs can do smaller circles and larger dog can do larger circles. Begin with repeating circles 1-5 times, once to twice daily. The number of circles and the number of sessions can be increased as the dog gains strength and improves balance.



Figure 32



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INSTRUCTIONS

REPEAT _1-5_ TIMES, _1-2_ TIMES DAILY.

Slalom Course (Figures 33 Video 23) Walk the dog through a slalom course of 3-5 cones or obstacles such that the space between each obstacle delineates a distance of 1-2 times the body length of the dog. Begin by repeating the maneuver 1-5 times, once to twice daily. The number of maneuvers and the number of sessions can be increased as the dog gains strength and improves balance.



Figure 33



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INSTRUCTIONS

REPEAT __1-5__ TIMES, __1-2__ TIMES DAILY.

Rear Limb

Sit to Stand- (Figure 42 and 43 and Video 32) This maneuver improves rear leg strength and range of motion.

With the dog sitting, use a treat to entice the dog to slowly stand and then to sit back down. Repeat the exercise 3-10 times, 2-3 times daily, increasing the number of repetitions as the dog gains strength. This is a moderately difficult exercise that requires a reasonable degree of weight bearing, strength and balance.

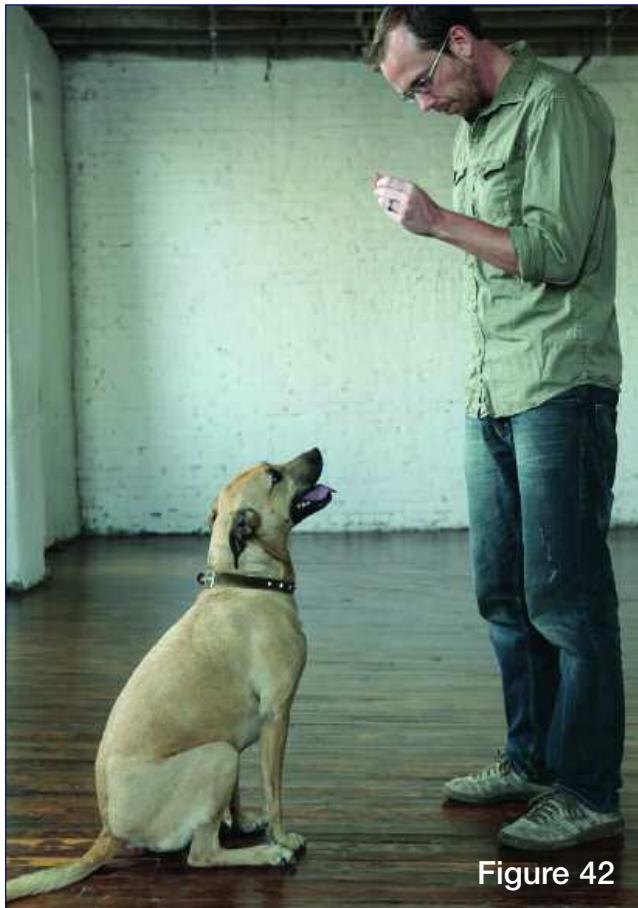


Figure 42



Figure 43



Video 32

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INSTRUCTIONS

REPEAT 3-10 TIMES, 2-3 TIMES DAILY.

Rear Limb

Uphill Walking- (*Figure 45 and Video 34*) This maneuver improves spinal extension, rear limb strength and weight bearing.

The dog is leash walked up a moderate to steep hill (depending on the dog's strength and conditioning) of at least 25 yards (meters) in length. Repeat 2-5 times, 2-3 times daily. The duration times and number of sessions can be increased as the dog gains strength and improves weight bearing and balance. This is a moderately difficult exercise that requires a reasonable degree of weight bearing, strength and balance.



Figure 45



Video 34

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INSTRUCTIONS

REPEAT 2-5 TIMES, 2-3 TIMES DAILY.

Rear Limb

Stairs- (Figure 46 and 47 and Video 35) This maneuver improves weight bearing, range of motion and leg strength.

Rear limbs are more stressed while going up stairs and the front limbs are more stressed while going down stairs. Choose stairs that are wide and closed. Begin by walking the dog up or down no more than 6-8 stairs, increasing the number of stairs as the dog gains strength. This exercise is repeated 1-2 times, 1-2 times daily. This is a moderately difficult exercise that requires a reasonable degree of weight bearing, strength and balance.



Figure 46

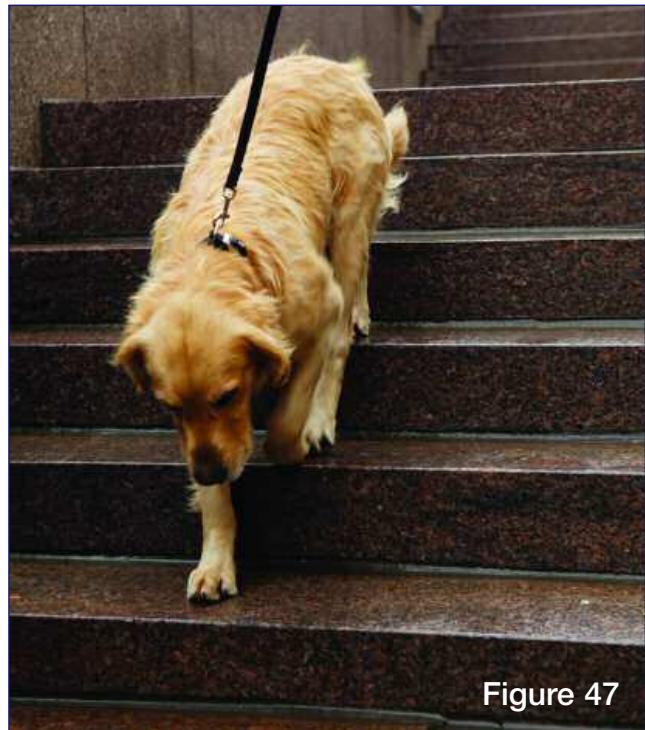


Figure 47



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INSTRUCTIONS

REPEAT __1-2__ TIMES, __1-2__ TIMES DAILY.