### What You Should Know About Cranial Cruciate Ligament

A ligament is a band of fibers that connects bones or cartilage and serves to support and strengthen joints. The cruciate ligaments of the knee joint are cross-shaped ligaments that connect the femur (the upper bone of the rear leg) to the tibia (the lower leg bone). The ligaments are located within the knee joint itself. In normal animals, the knee joint is very stable; but this stability is destroyed when the cruciate ligaments are torn. This instability leads to degenerative changes such as arthritis.

#### Causes

Trauma, such as being hit by a car, can tear the cruciate ligaments. This occurs most commonly in larger dogs. Most cases, however, occur in smaller dogs whose ligaments seem to degenerate with age. Obesity puts additional stress on the ligament and may be a contributing factor. The ligament ruptures with minor trauma such as running or jumping. Ruptured cranial cruciate ligaments also occur in cats, but less frequently than dogs.

#### Diagnosis

Your veterinarian may suspect a ruptured cranial cruciate ligament when you describe the rapid onset of rear-leg lameness following trauma or exercise that included running or jumping. Your veterinarian will confirm the diagnosis by palpating (examination by touching) the knee joint for instability. A sedative or anesthetic may need to be given so your pet relaxes enough to permit a thorough examination. X-rays of the leg frequently are taken as part of the examination.

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### Ruptured Cranial Cruciate Ligament

Your pet has a ruptured cranial cruciate ligament. The cranial cruciate ligament is found within the knee joint where it helps stabilize the knee. Ruptures of the cranial cruciate ligament are repaired by surgery. This client education sheet will help you learn more about ruptured cranial cruciate ligaments and will review your veterinarian’s instructions for your pet’s care at home, as well as follow-up with the veterinary health care team.

### Diagnostic Plan

- History
- Physical examination
- Palpation of the knee
- Radiographs

### Therapeutic Plan

- Enforced rest
- Analgesics
- Surgery

### Nutritional Plan

- Postsurgically, nutrition adequate for tissue repair
- If obesity is a complicating factor, restrict caloric intake so the patient reaches and maintains an ideal body weight.

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**Ends of the ruptured cranial cruciate ligament**

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Treatment and Home Care
Although a few animals (small, inactive patients) do well with enforced rest, most veterinarians recommend that ruptured cranial cruciate ligaments be repaired surgically. Surgical repair stabilizes the knee and helps prevent arthritis from developing. Surgery also allows a veterinarian to inspect the inside of the knee joint for tears in cartilage that often occur with cranial cruciate ruptures. Finally, surgical repair of one knee may help prevent similar ruptures in the cruciate ligaments in the opposite knee because the animal will bear weight normally on two rear legs rather than on one leg. After surgery, many veterinarians will bandage the leg for two to four weeks to enforce rest.

Home care consists of making sure the bandage on the leg remains clean and dry, giving all prescribed medications, following your veterinarian’s instructions for exercise restriction, and if you can see the incision, checking for swelling and drainage. If the bandage is removed or becomes wet, if your pet’s leg swells below the bandage or if you see any drainage from the incision, you should call your veterinarian. You should also report any changes in your pet’s appetite. You will need to return to your veterinarian’s office for bandage changes and suture removal.

Nutritional Plan
After your pet is treated for a ruptured cruciate ligament, your veterinarian may recommend a dietary change. Optimal nutrition for middle-aged and older pets, such as those with ruptured cruciate ligaments, provides for the pet’s needs, but more importantly reduces the health risk associated with feeding excess sodium, phosphorus, protein, and calories. Foods that avoid these harmful excesses and provide proper nutrition for pets include Hill’s® Science Diet® brand mature adult pet foods.

If your pet is overweight, your veterinarian may recommend a special food to return your pet to its optimal weight, which helps reduce stress on the knee joints and prevent the development of arthritic changes. The best food for reducing weight is a low-calorie food such as Hill’s® Prescription Diet® r/d® Canine Weight Loss-Low Calorie. Once your pet’s weight returns to normal, your veterinarian may recommend a special food with reduced calories and increased levels of fiber to help control weight, such as Prescription Diet® w/d® Canine Low Fat-Diabetic-Gastrointestinal. If your dog develops arthritis as a consequence of having ruptured his cruciate ligament, Prescription Diet® j/d® Canine Mobility provides the high levels of omega-3 fatty acids recommended to help decrease inflammation in the joint.

Transitioning Food
Unless recommended otherwise by your veterinarian, gradually introduce any new food over a seven-day period. Mix the new food with your pet’s former food, gradually increasing its proportion until only the new food is fed.

If your pet is one of the few that doesn’t readily accept a new food, try warming the canned food to body temperature, hand feeding for the first few days, or mixing the dry food with warm water (wait ten minutes before serving). Feed only the recommended food. Be patient but firm with your pet. This is important because the success or failure of treatment depends to a large degree on strict adherence to the new food.

Presented as an educational service by

Home Care Instructions

Client’s Name: ________________________________
Patient’s Name: ________________________________
Medication(s): __________________________________
Nutritional Recommendation: ________________________________
Follow-Up Appointment: ________________________________ (Hospital Stamp Area Above)

REGULAR VISITS WILL HELP OUR VETERINARY HEALTH CARE TEAM PROVIDE FOR YOUR PET’S BEST INTEREST.

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