

What to Do Quickly if Your Pet Starts Limping

It could be something more serious than a harmless cut or scrape. Know what to do now so you won't lose precious time before seeking help for this painful and debilitating condition.

Analysis by [Dr. Karen Shaw Becker](#)

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STORY AT-A-GLANCE

- Necrosis of the femoral head, also known as Legg-Calve-Perthes disease, or LCP, is a condition of the hip joint in which bone gradually deteriorates and dies. Continued use of the hip can cause early arthritis
- The most common sign of LCP is progressive lameness in the rear legs. Symptoms typically start with an abnormal gait or limp and progress to pain during certain movements, reluctance to run or jump, and sometimes generalized irritability
- Diagnosis of necrosis of the femoral head is made by physical examination and X-rays of the hip
- Treatment for LCP can be conservative, requiring several weeks of strict cage rest, or it can involve surgery (the recommended treatment in most cases). Regardless of the treatment approach, adjunctive therapies such as acupuncture, hydrotherapy, and massage can be extremely beneficial to the healing process
- Surgery for Legg-Calve-Perthes disease, called a femoral head and neck ostectomy (FHO), should only be performed by a board-certified veterinary orthopedic surgeon or a general veterinary practitioner with extensive experience in FHO procedures

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Necrosis of the femoral head is a condition that is known by several other names, including Legg-Calve-Perthes (LCP) disease and Legg-Perthes disease. It is also called aseptic or avascular femoral head and neck necrosis, which is actually the most descriptive and correct term, but it's too long and difficult to repeat. So for my discussion today, I'll refer to the condition simply as LCP.

The hip is a ball-and-socket joint, and the femoral head is the ball part of the joint. When an animal has necrosis of the femoral head, it means the ball part of the joint is progressively deteriorating and dying, and the joint is no longer functioning properly.

Continued use of the hip, which is a weight-bearing joint, sets the stage for early osteoarthritis. The deterioration and eventual death of the bone is due to loss of blood supply, resulting from either a growth abnormality or trauma to the leg or hip.

LCP is most often seen in young small breed dogs weighing less than 25 pounds. But it also occurs in larger breeds and can occur in cats as well. Terriers are the breed most predisposed to this condition, including the Cairn, Manchester, and West Highland White Terrier, as well as the Miniature Pinscher and Toy Poodle.

LCP occurs in both males and females, usually between 4 and 12 months of age, and is most often unilateral, meaning it occurs in only one hip.

Symptoms and Diagnosis of Legg-Calve-Perthes Disease

Necrosis of the femoral head in dogs is a painful, crippling disease. The most common sign is slow, progressive hind limb lameness, ultimately leading to the inability of the dog to bear weight on one or both back legs. When the condition is bilateral, meaning both hips are affected, it often begins in one leg and then progresses to the other.

What pet owners usually notice first is that their dog has developed an abnormal gait or limp, and there may be some swaying or staggering. Typically you'll also notice clear signs that your pet is in physical pain, especially when she lies down or stands up. Dogs with LCP can show a reluctance to run or jump, have difficulty climbing or descending stairs, and can be irritable due to chronic pain.

When a veterinarian examines a dog with LCP, there will be evidence of pain when the hip joint is extended, particularly with internal rotation. Pain will also be evident on forced abduction of the hip joint (when the leg is moved away from the body).

There may also be an audible click when the hip pops out of the joint, or a grating sound (crepitus) of bone on bone that indicates cartilage loss inside the joint. If the condition is advanced, the muscles of the affected leg will begin to contract, making it appear shorter than the healthy leg.

Accurate diagnosis of this condition also involves taking X-rays of the hip to visualize the degree of damage to the joint and to check for evidence of degenerative joint disease (osteoarthritis). Depending on the level of pain involved, some dogs may need to be sedated or anesthetized to endure not only a thorough physical exam, but also the X-ray process.

Conservative Treatment of LCP

In certain situations, conservative therapy rather than surgery can be attempted. For example, if the femoral head is still round, the joint spaces are still parallel, and the femoral head and acetabulum (the ball and socket) are congruent, the dog can be immobilized with very strict cage rest in an effort to allow the body to heal itself.

It's important to keep in mind that healing can only occur when the animal is resting and not bearing weight on the affected hip. Strict cage rest in this case means the dog can only be let out of his kennel to relieve himself. The owner carries the pet from the cage to the grass, where he's kept on a very short leash. He's allowed to pee and poo and then right back into the kennel he goes.

As you can imagine, this is quite difficult emotionally for both the dog and his humans. The dog feels he's in prison, and his caretakers feel helpless. It's a difficult time for everyone, so it's important to understand what "strict cage rest" really means.

During a period of cage rest, monthly X-rays should be taken to monitor the progress of the condition. The goal is complete resolution of both radiographic and clinical signs of LCP.

In some dogs, strict adherence to this therapy can result in normal X-rays of the femoral head, complete relief from pain, and a return to normal movement. It typically takes from 4 to 6 months for the femoral head to heal to the point where unrestricted weight bearing on the affected hip is permitted.

During this time, adjunctive treatments such as laser therapy, acupuncture, and massage can be very beneficial for pain reduction and improving circulation. Some vets are now advocating non-weight bearing water therapy as well, which I have found to be extremely beneficial for maintaining general muscle tone during long periods of mandatory cage rest.

I always use supplements with my LCP patients, including antioxidants, astaxanthin, and ubiquinol. I also use turmeric and omega-3 fatty acids.

Hyperbaric oxygen therapy is proving to be very beneficial for humans with avascular necrosis. If you have access to this treatment for your pet, I would highly recommend it as well.

Surgery for LCP and Post-Operative Therapy

If the femoral head continues to deteriorate or collapses during a period of cage rest, surgery will be required. In fact, in most cases of LCP, surgery is the recommended treatment. The procedure, called a femoral head and neck ostectomy (FHO), involves removing the femoral head and neck. In small breeds it's usually not necessary to replace the hip joint, but in larger dogs, the condition can require total hip replacement in some situations.

While the dog is healing from her surgery, her body will produce a fibrous tissue that creates a false joint. If the condition affects both hips, the surgery can be done on both legs at the same time, or they can be staged 6 weeks apart.

Passive physiotherapy — ultrasound, laser therapy, electrical stimulation, shockwave therapy, heat/cold therapy, acupuncture, etc. — should be started as soon as possible after surgery.

Carefully supervised exercise with very short, slow leash walks can begin as early as three days after surgery, with your veterinary surgeon's approval. Swimming can be very beneficial as well, once the sutures have been removed.

Analgesics and anti-inflammatories can help in the post-operative period, but most pets can begin to be transitioned to a natural pain management protocol after 3 to 4 weeks.

There are rarely complications from FHO surgery. However, a small number of dogs will continue to have some limping and/or discomfort. Sometimes a second surgery is required to remove residual bone spurs that are causing discomfort. I strongly recommend the FHO procedure be performed by a board-certified veterinary orthopedic surgeon. If a general practitioner will be doing your pet's procedure, it's imperative that he or she has extensive FHO surgical experience.

Prevention

Since most cases of necrosis of the femoral head are inherited, there's a limit to what you can do to help prevent this disease in your pet (other than not breeding animals carrying Legg-Calve-Perthes DNA).

If you're planning to purchase a small breed puppy from a breeder, ask about the potential for this disease in their breeding stock. If you have a small breed dog less than a year of age, keep an eye out for any signs that your pet may be having mobility problems or rear-limb pain problems. The sooner the condition is discovered, the better your puppy's chances for a complete recovery and minimal arthritic changes.
