

# Hip Dysplasia In Labradors

## Introduction- What is it?

Hip Dysplasia is a genetic disease that affects the hip joints of dogs. (It is also known as degenerative joint disease, arthrosis and osteoarthritis) and can lead to pain and debilitation in your Labrador. When canine hip dysplasia (CHD) was first described in the 1930s, it was thought to be a rare condition. Dysplasia literally means abnormal, so hip dysplasia literally translates as abnormal formation of the hip socket. Despite years of research and the combined effort of the Orthopedic Foundation for Animals and responsible dog breeders, it has been impossible to eliminate hip dysplasia from labradors. Hip dysplasia can be seen in dogs as young as five or six months of age. In others, symptoms do not develop until after the dog has matured.

## Cause

What causes it? Hip dysplasia is a multifactorial trait, which means that a number of different factors can contribute to it. However, hip dysplasia is basically a genetic trait and will not develop if the hereditary factor is not there to begin with. Many factors work together to cause this disease, which is a combination of a dog genetically inclined to get this disease interacting with environmental factors that bring about the symptoms. These environmental factors excess calcium in the diet of puppy food for large breed dogs, along with obesity, high protein and calorie diets.

## What Happens To A Dog Who Has Hip Dysplasia?

The hip is a ball and socket joint, in a normal hip the ball fits comfortably into the socket, forming a pivot point. Dogs who have a genetic predisposition for hip dysplasia are born with normal hips. However, as the dog grows, the structure of the hip joint becomes badly formed, and the ball no longer fits comfortably into the socket and therefore does not rotate smoothly. Both hips are usually affected, but only one side may show symptoms. The damage then spreads to the synovial membrane lining the joint capsule and more degradative enzymes and inflammatory cells stream into the joint. Full thickness loss of cartilage allows the synovial fluid to contact nerve endings in the subchondral bone, resulting in pain in your dog. If it is left untreated the disease continues to progress, eventually causing crippling lameness and severe pain. Correcting this problem at an early age can help prevent this.

## Symptoms Of Hip Dysplasia

No one can predict when or even if a dysplastic dog will start showing clinical signs of lameness due to pain, but there are signs and symptoms that you should look out for and be aware of. These can be:- Your dog may become unwilling to run and play as much as they used to.- They may have trouble getting up and down the stairs.- Popping or snapping sounds when walking.- They may be reluctant to exercise.- They may have difficulty in rising.- They may be reluctant to jump or stand on hind limbs.- Some may have a soreness after lying down or after heavy exercise.- A sensitivity to touch the hindquarters.- An abnormal stance (leaning forward) or gait (bunny-hopping).(If you notice any of the above signs your vet should examine your labrador. In many instances a second opinion from a surgical specialist is useful.)The condition will worsen until even normal daily activities are painful. Without intervention, these dogs may be unable to walk at all by a couple years of age. In most cases, however, the symptoms do not begin to show until the middle or later years in the dog's life

## Diagnosis

There are many diseases which display the same symptoms as hip dysplasia, therefore the only true way to diagnose hip dysplasia is by a complete physical and neurological examination, and then x-ray of the hips. Diagnosis of CHD is based on breed, history, physical exam findings, and an x-ray of the dog's pelvis. The standard hip-extended view is taken with the dog on his back, his legs fully extended, and his knees inwardly rotated. The x-ray film is then evaluated for the general appearance of the hip joints as well as for signs of degenerative joint disease (DJD). Other less commonly used methods of diagnosing hip dysplasia include computed tomography (CT scan), and ultrasonography.

## How Is Hip Dysplasia Treated?

The treatment depends a lot upon the severity of the hip dysplasia and the age of the dog concerned. Treatment varies from simply restricting exercise to daily anti-inflammatory medications to surgery, depending on the severity of the condition. Proper treatment often allows affected dogs to live reasonably normal lives. The vet will discuss the prognosis for your dog. Any dog with hip dysplasia should be kept fit and trim as any excess weight will obviously aggravate the condition, but good muscle tone will help to support the dog's weight. Swimming is an excellent form of exercise which builds up the muscle without stress to the joints. Non-steroid anti-inflammatory drugs, such as aspirin and carprofen, can often help manage pain. Research has shown that Vitamin C can also reduce the inflammation in the affected joints. Some people have also reported success with holistic medicines. However, in some dogs the arthritis in the joint can become so painful that it cannot be controlled medically. When the pain becomes this bad, there are various surgical procedures which can be done to relieve the pain. Each procedure has its pros and cons, and different veterinary surgeons may have more experience, and therefore be more skilled, with a particular type of surgery. One such procedure is called a femoral head osteotomy. This involves removing the head and neck of the femur so that the bone does not contact bone, and a fibrous scar tissue then forms a "false" joint. As the dog's muscles must be strong enough to support the dog's weight on the false joint, regular exercise is very important. Another surgical procedure is hip replacement. This is the same as the human hip replacement, the diseased joint is taken out and an artificial joint is inserted. Other Ways To Help Your Labrador If They Have Hip Dysplasia- Keep your dog's weight under control and provide controlled exercise. (Going for short walks will give you an idea of your dog's limits. Proper exercise will maintain muscle tone and keep the joints moving and more fluid. Swimming is a superior form of exercise to achieve this goal.- A warm environment and a well padded bedding area are also of benefit. Additional warmth helps chronically infected joints. Hot water bottles are helpful. Be safe when using, to avoid burning your dog.- If your Labrador lives outside, bring them in the house. The harsh conditions and weather changes are hard on those already aching joints. Plus, they need a nice soft place to lay and sleep.

## Prevention

No guarantee can be given when breeding hip dysplasia free dogs radiographically that their offspring will not develop the disease. A dog can be hip dysplasia free on a radiograph, yet still carry the genetic predisposition to this disease that will be transmitted to its offspring. The environment plays a large part in whether or not a dog will suffer from hip dysplasia. Nutrition is the greatest contribution. Puppies should be kept lean and not fat, obviously a puppy which is carrying round too much weight will exacerbate any degeneration of the joint. Research has also shown that giving a diet too high in protein and calcium also exacerbates the condition. Rapid growth in a young puppy also contributes, and, in most cases, the rapid growth rate is directly related to feeding a high calorie diet to puppies. Over supplementation of calcium has likewise been shown to be a major factor in the development of skeletal disease in puppies. Exercise is the other main contribution. Many people over-exercise young puppies, or give them the wrong type of exercise. The wrong type of exercise can include forced running for any distance and too much exercise on tarmac or other hard surfaces. Up to at least six months of age, exercise on hard surfaces should be kept at a minimum. Correct exercise for puppies includes running and playing in the garden or in a park, although games that involve jumping and very rough play should be avoided, and your puppy should be allowed to rest as soon as he has had enough and must not "over-do" it. Swimming is an excellent form of exercise which builds up the muscles without putting stress on the joints.

## Prognosis For Dogs With Hip Dysplasia

If your dog is affected by Hip Dysplasia, and shows mild to moderate evidence of joint degeneration, they are considered to have a good prognosis with either conservative or surgical treatment methods. The severity of joint degeneration may not be evident by observing symptoms alone, and joint deterioration may progress in the absence of clinical symptoms. In cases demonstrating significant progression of joint disease, it may be anticipated that at some point, these dogs may not be sufficiently managed by conservative therapy alone. Surgical intervention then becomes a viable option for restoring normal function and activity.