Two Harbors Veterinary Clinic
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CANINE HIP DYSPLASIA

Canine hip dysplasia (CHD) is a malformation of the hip joint that results in painful arthritis if left untreated over a long period of time. The time it takes to develop arthritis depends on a number of factors, including the severity of the dysplasia and the size of the dog. The purpose of this handout is to discuss this disease and what treatment options are available.

How Do Dogs get CHD?

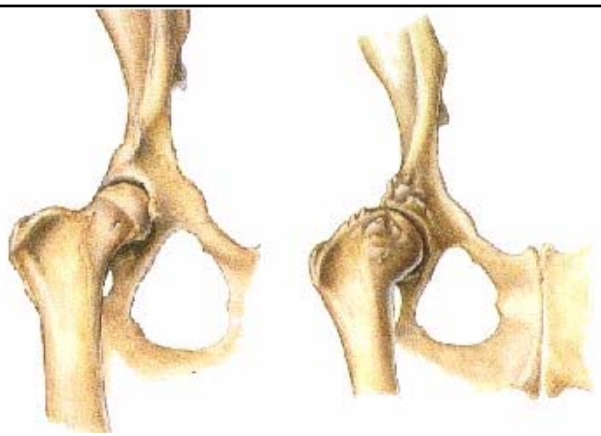
It is well-accepted that genetics is a major factor in CHD. Other than obtaining the animal from a responsible breeder, this is something the average dog owner has little control over.

However, nutrition can also play a role. We recommend feeding puppies destined to grow over 60 pounds a Large-Breed puppy diet. Major dog food companies like Purina, Hill's and Iams produce these. The goal is to manage young dogs so that they get to their adult weight slower.

How do We Screen for CHD?

While any dog can have CHD, certain breeds are more prone to developing it. German Shepherds and Labrador Retrievers in particular seem very prone. Any dog with an adult body weight of over 60 pounds warrants a screening x-ray around 6 months of age.

Certification is necessary for dogs that are going to be bred. There are two techniques:



The hip on the left is normal. Notice how tightly the ball fits into the socket. The hip on the right is dysplastic. Failure to correct this condition early in life results in the changes seen here: arthritic bony proliferation of the head and neck of the femur, resulting in a very painful joint.

Orthopedic Foundation of America (OFA) certification and Penn Hip.

OFA is the long-time standard for diagnosis of CHD. The dog's hips are graded objectively. The biggest drawback to OFA is that the test cannot be performed until the dog is two years old. This can have a dramatic limitation on the treatment options available.

Penn Hip involves the taking of several x-rays using several hip positions. Your dog gets a measured laxity of its hips. This procedure can be performed at six months of age, expanding the number of treatment options available.

The Penn Hip is probably a better procedure for predicting arthritis, but at this point in time OFA remains the breeders' standard.

Surgical Treatment Options

The preferred method of surgical treatment of CHD is called a Triple Pelvic Osteotomy (TPO). In doing this procedure the hip joint is reformed to become more congruent, decreasing the likelihood of arthritis.

A TPO can only be performed on animals younger than 14 months. This age cutoff is why we strongly reccomend checking for dysplasia at 6 months, either by a regular x-ray or with Penn Hip. Cost for this procedure runs around $3000 per hip.

Two surgical options can be performed at any age. In a Femoral Head Ostectomy (FHO) the end of the "ball" of the joint is simply cut out. The leg becomes much less able to hold up weight, but dogs are pain-free after this procedure. This procedure costs $900-1100 per hip.

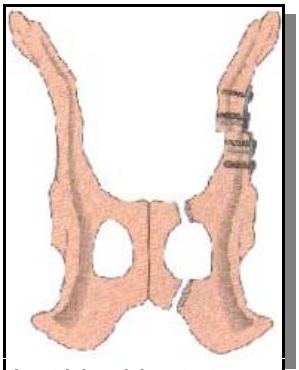
Total hip replacement is a procedure in which the articular surface on both sides of the hip is replaced. The main disadvantage to this procedure is cost, running $8000 per hip.

Medical Treatment Options

While surgical therapy is the preferred treatment of CHD, the one-time cost of these procedures can certainly be blinding. Arthritis from CHD can be managed medically as well, but it is important to understand that this therapy is palliative only, not curative.

Medical therapy of CHD involves anti-inflammatory drugs, joint supplements, and controlled exercise. Powerful anti-inflammatory drugs can relieve discomfort, and supplements can slow the progression of arthritis. Controlled exercise maintains muscular strength and avoids obesity, both of which decrease the forces applied to arthritic joints.

Using these three therapies in combination can help keep many dogs with CHD quite comfortable, sometimes eliminating the need to consider surgery.



In a triple pelvic osteotomy three pelvic bones are cut to allow the socket to be remodeled so it covers the ball better.