

Canine Hip Dysplasia

- Canine hip dysplasia is a painful disease that can lead to debilitating arthritis.
- It affects the “ball and socket” joint of the hip.
- Canine hip dysplasia is a hereditary problem that can be influenced by lifestyle factors. Certain breeds are predisposed.
- Hip dysplasia can sometimes be treated medically, but surgery is often required.
- Early recognition and a program of weight management and regular exercise can sometimes slow disease progression.

What Is Canine Hip Dysplasia?

Canine hip dysplasia is a painful disease that affects millions of dogs each year. It is an inherited developmental disorder of the hip joint and can lead to debilitating arthritis. Its progression can be influenced by environmental factors, such as weight gain, nutrition, and exercise. Certain breeds, especially larger ones, are particularly prone to hip dysplasia, but the disease can affect dogs of any size and breed.

Just as in humans, the hip joint in dogs is a “ball and socket” joint. In healthy dogs, the ball and socket fit together tightly. In dogs suffering from hip dysplasia, the joint is “loose,” and the ball part of the joint may even rotate partially out of its socket. In time, this looseness causes wear and tear on the joint cartilage, leading to osteoarthritis.

Canine hip dysplasia is an inherited problem, meaning that certain breeds or families of dogs may be prone to it. For this reason, when purchasing or adopting a puppy, especially if it is a breed that is known to be predisposed to hip dysplasia, make sure the parents (if known) do not have hip problems and that the puppy has been screened by a veterinarian for any early signs of the disease.

What Are the Signs?

The disease is painful and progressive and can affect one or both hips. It can affect very young dogs (many are less than 1 year old), but dogs of any age

can be affected. Clinical signs include:

- Decreased activity level
- Difficulty rising
- Stiffness or lameness upon waking or after exercise
- Running with a “bunny hopping” gait
- Difficulty climbing stairs or getting in and out of vehicles
- Discomfort in a sitting or lying position
- Lameness
- Muscle atrophy (wasting) in the hip area

Breeds that are most commonly affected include:

- German shepherd
- Labrador retriever
- Rottweiler
- Great Dane
- Golden retriever
- Saint Bernard

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Diagnosis

A diagnosis of hip dysplasia is made based on clinical signs, physical examination, and radiographs (x-rays). Two systems have also been developed for screening and/or diagnosing dogs with hip dysplasia. Responsible breeders use at least one of these systems before including a dog in their breeding program:

- **The OFA System:** The Orthopedic Foundation for Animals (OFA) oversees a multibreed hip registry database. The OFA’s system, which has been in use since 1966, has developed a

Common Conditions

standardized evaluation system and radiographic test to help breeders and owners assess the hip health of prospective parents as well as any puppies they may produce. Dogs must be 24 months of age or older to be included in the registry.

- **The PennHIP System:** The PennHIP system, which was developed at the University of Pennsylvania School of Veterinary Medicine, has been in use since 1993. It uses a series of three radiographs to assess a “distraction index”—or DI—for each dog. The greater the DI, the higher the chances that the dog has or will develop hip dysplasia. The PennHIP analysis can be performed in puppies as young as 4 months of age.

Treatment

Canine hip dysplasia is a serious, progressive disease, and better outcomes are typically achieved when it is diagnosed as early as possible and management and treatment measures are initiated promptly. Risk factors for the development of hip dysplasia in dogs that are genetically prone to the disease include obesity and overfeeding large-breed puppies during growth phases.

A proper diet that helps maintain an ideal weight, combined with a veterinarian-approved, regular exercise plan, can help slow the progression of hip dysplasia for some dogs. In less severe cases, medical management can also include providing pain medications as needed under veterinary supervision as well as administering oral or injectable joint supplements or medications. “Comfort care,” such as keeping dogs out of cold weather and performing massage or physical therapy, can also help keep affected dogs comfortable and slow progression of the disease for as long as possible.

In severe cases, surgery may be indicated. Surgical options include hip replacement surgery, reconstructing the hip joint, or removing the abnormal part of the joint and allowing the surrounding structures to form a “false joint” over time. Your veterinarian will discuss the best methods of management with you and whether surgery is an option for your dog.

NOTE: Canine hip dysplasia can be an expensive disease to manage and/or treat. Before purchasing or adopting a puppy, be sure to find out the hip “status” of the parents. If that is not possible, be sure to have your puppy’s hips evaluated by your veterinarian as soon as possible.