

HIP DYSPLASIA AT A GLANCE

WHAT IS HIP DYSPLASIA?

Hip dysplasia occurs when the hip socket develops abnormally in young dogs. It may or may not be bilateral, affecting both right and left sides. It is brought on by the laxity of the muscles, connective tissue, and ligaments that support the joint. Puppies are born with normal hips, but due to hereditary and environmental factors the soft tissues that surround the joint start to develop abnormally thus the bones are not held in place.

With a normal hip joint, the ball of the femur bone fits tightly into the concave socket of the pelvis. There is also a cartilage covering that gives the joint a smooth and tight fit, allowing the animal free range of motion. With hip dysplasia, this ball-and-socket joint may have a loose, incorrect fit, or one or both parts of the joint may be misshaped, causing friction and abnormal wear. The ball-and-socket joint becomes loose and does not stay in place during rotation. The joint becomes inflamed from the damage, starting a continuous cycle that results in a non-functional hip that dislocates with normal movement. Although hip dysplasia is more common in large breed dogs, it can also occur in medium and small breeds and in crossbred dogs, as well.

PREVENTION

Genetics do not define what will happen, but they give a good indicator of what might happen – diet, exercise and environmental influences tell the rest. Most researchers agree that there is a genetic link to hip dysplasia but they also agree that environmental factors can play a major role in hip dysplasia. Environmental factors such as nutrition and exercise may be risk factors. It stands to reason that obese puppies carrying around extra weight will exacerbate denegation of the hip joint. Giving excessive protein and calories to puppies can cause rapid growth of the bone framework, and the puppy cannot often keep up with this growth. Bones become soft as calcium is not laid down fast enough. There are large-breed diets for puppies that encourage maximum joint growth while allowing normal size development. Over exercising a young dog may also contribute to hip dysplasia. Maintaining good muscle mass and moderate exercise will actually help hip dysplasia but injury, overexertion, or repetitive motions (jumping) in young puppies may also affect the shape of the joints negatively during critical formation months.

TREATMENT

Treatment depends upon the pet's clinical signs and amount of discomfort. There are very effective non-steroidal anti-inflammatory drugs that have minimal side effects, some of these include Glucosamine, Chondroitin, Buffered Aspirin, Rimadyl, Vitamin C and Polysulfated Glycosaminoglycan (Adequan). In severe cases surgery may be needed but consult a veterinary before starting any treatment.

SUMMARY

As I discussed earlier, hereditary, nutrition, exercise, and body weight all contribute to the severity of degenerative joint disease. But one of the important factors in preventing hip dysplasia is selective breeding. We know that through selectively breeding animals with good hips can significantly reduce the incidence of hip dysplasia. We also know that we can increase the incidence of hip dysplasia if we choose to use dysplastic animals for breeding. Breeding two

animals with excellent hips does not guarantee that all of the offspring will be free of hip dysplasia but there will be a much lower incidence than if we breed two animals with fair or poor hips. If owners insisted on only purchasing an animal that had parents and grandparents with certified good or excellent hips, or if breeders only bred these excellent animals then hip dysplasia would be reduced. For the best results, buyers should look at three or four generations of dogs prior to theirs to insure that there aren't carriers in the bloodline.

There is no cure for hip dysplasia, but responsible breeders are doing a good job of reducing the occurrence. By feeding puppies appropriately and catching the symptoms early, you can decrease the clinical severity and reduce the problems your dog has to deal with later in life.