HIP DYSPLASIA
Sophie A Grundy BVSc (Hons) MACVSc

Hip dysplasia is a debilitating condition associated with malformation, degeneration and deterioration of the hip joint resulting in arthritis and pain. In the dog, hip dysplasia is a multi-factorial genetic disease. The ‘genetic’ component means that whether or not your dog develops hip dysplasia will depend partly upon the genes that it was born with: genes that it received from its parents. The ‘multifactorial’ component of hip dysplasia is complicated and means that there are many other factors in addition to genetic factors that influence the development and severity of hip dysplasia. Some of the known factors that can contribute to the development/severity of hip dysplasia include the caloric intake influencing rate of growth.

The clinical signs associated with hip dysplasia may occur at any age depending upon the severity and the presence of contributing factors. For example, if an individual animal is born with the genes for hip dysplasia and is overweight, it is more likely to show clinical signs at an early age. The same dog, if kept lean and conditioned, may not show clinical signs until later in life, or the clinical signs may be less severe. If a dog is born with the genes for hip dysplasia (the genetic component) it is impossible to PREVENT that animal from developing degeneration and deterioration of the hip joint; however, the severity of but the severity of the condition can be influenced by environmental factors (the multi-factorial component).

Currently, veterinarians are unable to complete a blood test or genetic test to detect hip dysplasia in the dog; however, individual animals may be evaluated via hip x-rays or radiographs. The two commonly recognized organizations that evaluate hip radiographs are Orthopedic Foundation of America® (OFA) and PennHip®. The positioning for both radiographic techniques is uncomfortable and strange for dog; typically OFA films are obtained under mild sedation while PennHip films are completed under general anesthesia. It is recommended that radiographs be performed by a veterinarian familiar with the technique. OFA certification is made after the x-rays are evaluated by a board certified radiologist. Individuals are required to be greater than 24 months of age for OFA certification, although evaluation is possible at any age.

Currently, there is no cure for hip dysplasia. Many treatments are available to alleviate the pain associated with hip dysplasia, both medical (non steroidal anti inflammatories, joint protective products) and surgical (triple pelvic osteotomy, total hip replacement). Routine screening of all breeding animals PRIOR to breeding is recommended. The best reduction of hip dysplasia in a line of dogs occurs if breeding stock is selected only from litters in which all the dogs were radiographically normal.