

Canine Hip Dysplasia

What is canine hip dysplasia?

Canine hip dysplasia is a developmental condition that is characterised by instability of the hip joint. The hip joint is a ball and socket joint where the femoral head (ball) should fit snugly into the acetabulum (socket) of the pelvis.

Affected dogs are born with morphologically normal hips however, during a puppy's early development the soft tissue structures which surround and stabilize the joint, such as the joint capsule and ligaments, become loose. This causes subluxation of the joint where the femoral head slides in and out of the socket and this in turn results in structural changes to the various components of the joint. The femoral head becomes flattened and its shape changes, the socket becomes shallow, and erosion of the articular cartilage occurs.

Canine hip dysplasia can be a crippling disease in the young dog and the secondary osteoarthritis that develops can be equally disabling in the older dog.

Canine hip dysplasia is most prevalent in medium to large breed, rapidly growing dogs and it generally affects both hips. The age at when the signs of hip dysplasia are first seen is variable and depends on the severity of the disease but it is generally seen between 6 and 12 months of age.

The cause of hip dysplasia is primarily genetic in origin however, environmental factors such as obesity and the wrong type of exercise lead to increasing the instability and secondary degenerative changes. Because environmental factors are implicated in the development of hip dysplasia owners can positively influence how their puppies grow and develop.

Many dogs with hip dysplasia can lead normal, active lives without the need for surgery however for others surgical intervention is required in order to give the dog as pain free life as possible.

Why does hip dysplasia cause pain?

Pain is caused initially by the subluxation of the joint causing repetitive strain and sprain injuries to the muscles and ligaments that stabilize the joint. As the surfaces of the ball and socket rub over one another microtraumas and erosion of the cartilage occurs resulting in the development of osteoarthritis. This leads on to chronic pain.

Physiotherapy, hydrotherapy, regular controlled exercise and targeting Activities of Daily Living (stairs, flooring, feeding height etc), joint supplements as well as massage therapy can all be part of the multimodal approach to managing canine hip dysplasia.



What are the signs of hip dysplasia?

Stiffness, lameness, swaying hind limb gait with shortened stride.

Reluctance to exercise.

Difficulty in rising, sitting or lying down.

Difficulty in climbing stairs or getting in and out of the car.

Pain and discomfort.

Poor muscle mass over the hips.

Decreased range of motion to the hips.

Behaviour changes - reluctance to play, changes in appetite and sleeping patterns, anxiety.

ACTIVITIES OF DAILY LIVING

By following some simple steps you can help your dog to manage his hip dysplasia



BODY WEIGHT

Dogs must be kept as lean as possible with an optimum body condition score of 4/9 (normal is 5/9). Excess body weight places additional strain on all the joints and adipose (fat) tissue releases destructive enzymes which damage the cartilage further.



STAIRS

Should be avoided where possible, particularly going downstairs. If your dog has to go up and down stairs, try and limit the frequency. Consider using a stair gate to prevent access.



CARS/ FURNITURE

Jumping into and out of a car or on and off of the sofa can be particularly troubling for a dog with hip dysplasia. Dogs should be lifted in and out of the car where possible or use a non-slip ramp or steps to help them in and out.



EXERCISE

Care should be taken not to over exercise during development as this can result in microtraumas to the joint, repetitive strain injuries to the supporting muscles and the risk of increasing instability of the joint. Young dogs should not be introduced to sports, such as agility, too early.



FLOORING

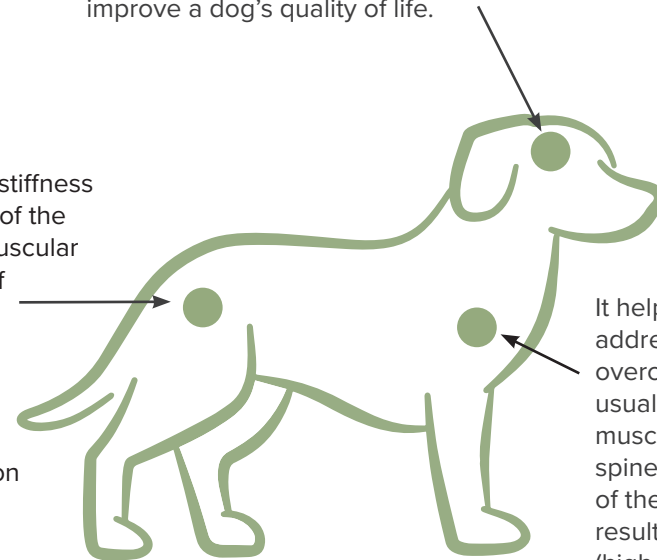
Today's modern homes can be a difficult environment for a dog living with hip dysplasia. Laminate and tiled floors may cause a dog to slip and slide. This can result in a lack of confidence in walking on the floor, muscle strains and further microtraumas to the joint/s resulting in a pain flare up. Use antislip tape, mats and runners to help prevent slipping.

How can clinical canine massage help?

Clinical Canine Massage is an excellent modality to help both young and older dogs with hip dysplasia

Massage aids in pain management by inhibiting pain signals to the brain, reduce tension and anxiety which are often seen as a result of hip dysplasia, and improve a dog's quality of life.

Massage can reduce stiffness and improve mobility of the hip joint. It relieves muscular tension, particularly of the gluteal muscles, which work hard to try and prevent the hip sliding in and out of the socket. It reduces inflammation around the joint by improving lymphatic drainage.



It helps to address areas of overcompensation usually seen in the muscles of the lumbar spine and the muscles of the forelimbs which results in hypertonia (high toned muscles) and myofascial trigger points (hyperirritable bands of focal point tension within the muscle tissue)

Massage can also help to improve overall joint health by increasing circulation and oxygenation to the tissues and removal of metabolic waste products