



## Canine Hip Dysplasia



*Barkers k9 Hydrotherapy*

Chessington

### *What is hip dysplasia?*

Hip dysplasia is abnormal development of the hip joint and often occurs in both hips. The hip joint is a “ball and socket” joint, which allows movement in many different directions.

Affected animals have a normal joint at birth but due to many different factors the soft tissues of the joint become loose (laxity) and the joint becomes unstable. Over time this laxity causes the normal ball and socket to become less congruent where the ball and socket become flatter and no longer fit together well. Weight-bearing of the joint then leads to excess motion causing inflammation, pain, physical abrasion of the articular cartilage and stress fractures in the bone beneath this cartilage. This leads to early and irreversible arthritis.

### *How would I know if my dog has hip dysplasia?*

The earliest signs are usually seen between 4 and 10 months of age up to 5+

- Stiffness after rest,
- Difficulty getting up from a lying/sitting position
- Reluctance/inability to exercise
- Sometimes a “clunking” sound is heard when the dogs get up/walk.
- The lower back may seem rounded or hunched as attempts are made to shift the weight onto the front legs.
- Typically the feet of the hind limbs are placed close to the midline
- A short potterly hind limb gait with swaying of the hips.

Your vet will manipulate the hips to feel for pain or instability. X-rays are necessary to confirm this hip laxity and to show early bony changes/arthritis.

### *What can be done?*

Unfortunately, there is no way of making affected joints normal. If left untreated, the joints remodel and become stable, but they will be arthritic and painful. Where possible it is preferable to opt for conservative management at first. Weight loss with dietary change as needed; regular but controlled exercise (including hydrotherapy); nutritional supplementation omega-3 fatty acids, glucosamine and anti-inflammatory painkillers may control the pain whilst the hips develop and stabilise. If this approach is not effective then surgery should be considered. There are several surgical options and your vet will discuss with you which option he/she feels is most suitable. However you should always consider the implications involved in the dog’s recovery when making your choice.

### *Aims of rehabilitation*

A full physiotherapy assessment should be undertaken by a canine physiotherapist. Possible findings might be –

- Altered gait pattern, with or without lameness,
- Reduced weight-bearing
- weakness of specific muscles (most commonly the gluteal muscles)
- Pain
- Reduced range of movement (ROM).

Your physiotherapist may suggest:

- Targeted exercises specifically for the gluteal muscles

- Balance and coordination exercises
- “Hands on” therapy such as massage and basic stretching for pain relief and improving flexibility
- Pain relief might be provided using laser therapy

## How can Hydrotherapy help?

Hydrotherapy can be a useful tool for:

- Strengthening specific muscles: improving muscle tone is the single best way to support a joint and reduce laxity and pain. The buoyancy of the water provides support to the body making a dog up to 75% lighter which in turn reduces the load on the affected joints whilst exercising the necessary muscles.
- Improving gait patterns. Gait patterns can be improved which is especially helpful when the dog has adopted a compensatory gait.
- Reduction in swelling: The hydrostatic pressure of the water acts as a compression and can help reduce swelling.
- Improved range of motion: Due to the reduced weight on the joint a dog is more willing to use it through a fuller range of motion in the water thus freeing off tight joints.
- Weight loss: Dogs with joint issues sometimes cannot exercise enough on land without causing pain and this can lead to an increase in weight and in turn an increase in pain. This leads to further reduction in exercise and it can become a vicious cycle
- Pain reduction; improving range of motion and reducing swelling all contribute to a reduction in pain.

## Physio tips and exercises

1. Reduce your dog’s weight in order to reduce pressure on their hips. The heavier your dog weighs the more stress and strain will be put through your dog’s joints, this will lead to an increase in inflammation, pain and limit their range of motion.
2. Walk on lead as much as possible! Ensure your dog gets an adequate warm up and cool down time when walking. This should consist of at least 10 minutes slow lead walking before and after any off lead activity. It’s important to make sure your dog’s joints, muscle and surrounding structures are looked after on a daily basis. Slow lead walking will make your dog weight bear evenly on all 4 limbs and therefore increase range of motion within the hip joints. Slow lead walking is also good for increasing core and postural strength, coordination, proprioception and stride length.
3. Avoid climbing upstairs, jumping into cars and slippery floor surfaces. Any sudden twisting, jumping or slipping can cause micro-trauma to an already injured area, this will cause an increase in inflammation around the injured site and will not only cause your dog pain and discomfort but also worsen their condition.
4. Instead of playing ball games use scent games or lick mats etc. Throwing a ball leads to prolonged adrenaline release and cortisol release, therefore dogs with high prey drives will carry on chasing a ball despite being in pain. Chasing balls will also cause repeated micro-trauma to muscles and cartilage and therefore cause long term damage and future damage on already weakened joints, such as hips.
5. Record your pet’s behaviour daily, this way you can note any changes which could indicate pain or discomfort. Is your dog becoming more reluctant to go on walks, sleeping more or becoming reactive? These are all signs of pain and discomfort.

*If you are concerned about the health of your pet you should contact your veterinary surgeon.*

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