Hip Dysplasia

Hip dysplasia is an abnormal formation of the hip socket that occurs during an animal's growth period.

What are the signs?
Some of the signs are:

- Bunny hopping (where both legs move together)
- Swaying or staggering in the hind limbs
- Reluctance to run and jump
- Difficulty lying or standing
- Lameness

Signs are variable but some animals' show no signs whiles others show crippling lameness and develop arthritis. Many large breed dog owners have heard of hip dysplasia, however anyone owning a dog should become familiar with this condition.

Causes
Several factors contribute to the development of this problem.
In some breeds, such as:

- German Shepherd
- Rottweilers
- Labrador
- Golden Retriever
- St Bernard

There is a high genetic component, but environmental factors play a role as well and include diet, weight gain and exercise.

The normal hip is a ball and a socket joining that fits tightly and allows a broad range of motion.

A dysplastic hip typically has a loose fit leading to abnormal wear and tear, cartilage damage and leads to inflammation and pain if left unrelated osteoarthritis.

Diagnosis
Whilst a suspicion of the condition can be made in a consultation, generally sedation, examination and radiographs are required for confirmation. This also gives an indication of the severity of the condition.

Even as young as, 3½ - 4 months of age, radiographs can accurately predict which puppies will go on to have problems. Figures tell us this is about 30% of German Shepherds, 20% of Golden Retrievers and Rottweilers and 15% of Labradors. Diagnosis at this age allows early intervention which can significantly improve the shape of the hip.

Treatment
There are various medical and surgical options available depending on the age of the dog and the severity of the condition.

Non-surgical options
These are essentially the same as treatment for arthritis and include weight management and medications to help support and repair cartilage and medications to relieve pain and control inflammation.

Surgical options

The benefit of diagnosis at an early age is that less invasive options are available and potentially before irreversible changes have occurred.

JPS

JPS relies on potential growth to work; hence it is generally not applicable to dogs over 4 ½ months of age. The procedure fuses the pubic symphysis area which stops the area growing as the rest of the pelvis grow this leads to better coverage of the ball by the socket, giving better stability in the hips. Several studies have now proven the effectiveness of JPS - the main problem is diagnosing the puppies young enough. This procedure can be performed at the same time as desexing reducing the need for anaesthetics.

Femoral Head Osteotomy - Also known as FHO

Is the surgical removal of the head and neck of the femur.

This way the bones of the joint are no longer in contact, which eliminates the pain that is caused by the abnormal contact of the bones in an animal with hip dysplasia or severe osteoarthritis. This procedure is usually used as a last resort or salvage procedure in dogs with severe hip dysplasia that are not candidates for a total hip replacement.
The surrounding muscles and developing scar tissue work to support the area and act as a false joint. This means that now when the limb is moved, the forces are transferred to the pelvis rather than the leg itself.

The procedure causes the leg to be slightly shorter than the unaffected leg, although amazingly, most dogs and cats return to close to normal activity after the surgery.

While there are no specific weight guidelines for the use of an FHO, smaller dogs typically have a better outcome since less stress and force is carried on the false joint than would be in a large dog.

Total Hip Replacement - Also known as THR

A THR involves removing both the arthritic (femoral head) and socket (acetabulum) and replacing them with an artificial ball and socket joint.
Research has shown evidence that dogs return to normal function in 3-6 months following THR.
These patients do not require long term drug therapy which reduces the potential problems and complications associated with the chronic use of anti-inflammatory drugs.

The success rate of this procedure is very high however choosing an experienced surgeon is paramount. It is highly recommended that the services of a specialist orthopaedic surgeon is sought.

More than 95% of the patients who receive a THR should be able to use the new hip for the rest of their life.

Dogs often begin using their operated limb on the day of surgery. Most dogs use their operated leg quite well within a couple of weeks but activity is supervised and limited to leash walks for approximately 12 weeks after surgery.