

Hip dysplasia

is a relatively common disorder affecting the hip joints of dogs. This disorder is genetic, and because it can be passed to offspring, it is recommended that pets with hip dysplasia are not bred and should be either spayed or neutered. Some environmental factors, such as over-feeding or excessive exercise, will hasten the development of genetically predisposed individuals.

Hip dysplasia is a condition that is progressive in nature, and if left untreated or undetected, can cause irreversible damage to the joints. Since it is a genetic condition, the disorder is present at birth, though it is unlikely that you will see signs of the disorder at that young of an age. Early detection of the disorder allows for greater success in treatment, and the chance to prevent significant damage to the joint. Diagnosis of hip dysplasia requires a thorough physical examination and radiographs (x-rays). Pets with suspected hip dysplasia can be examined and radiographed as early as four months of age.

Dog's hips are very similar in anatomy to ours in the sense that it is a ball and socket configuration. A diagnosis of hip dysplasia means that the fit of the ball within the socket is less than ideal. This poor fit allows instability or "slop" within the joint. The laxity present allows for excessive movement within the joint which creates inflammation, causes abnormal wear on the cartilage surface and creates arthritis. These changes can then be detected radiographically.

Normal Hip Conformation

Dysplastic Hips



Hip dysplasia is a very complex problem, with many considerations for treatment. The choice of treatment requires an understanding of the disorder and the expected results of the treatment options available. The goal of treating patients with hip dysplasia is to improve hip conformation, alleviate discomfort and improve the patient's athletic ability, allowing them to lead a comfortable life.



Packerland Veterinary Center also offers accelerated rehabilitation programs. We have the ability to use an Underwater Treadmill starting as early as two to three weeks after surgery, which drastically shortens recovery time.

For more Information or to Schedule a Consultation, please call: (920) 498-2808 or 800-236-2808.

www.packerlandvet.com



HIP DYSPLASIA



IN THE CANINE PATIENT

 Packerland
VETERINARY Center, Ltd.

121 Packerland Dr. Green Bay, WI 54303
Phone: (920) 498-2808 Fax: (920) 498-1365

www.packerlandvet.com

Treatment of hip dysplasia falls under two main categories: Medical Management and Surgical Treatment.

Medical Management uses medications and supplements to control pain and make the pet comfortable. It does not however improve the anatomy of the joint and create a better fit of the ball and socket. Medications include prescription pain medications available through your veterinarian and over-the-counter products. Many of the over the counter products that people take, such as ibuprofen, naproxen, acetomenophen, etc are toxic to pets. There are also some nutritional supplements available which may help provide building blocks for healthy joints to help slow the progression of arthritis. Some of the most common supplements used are: Glucosamine Hydrochloride, Chondroitin Sulfate and MSM. Any patient on long-term medications should have regular blood work checked to ensure the medication is not causing damage to the liver and kidneys. Use of over-the-counter products should only be under the guidance of your veterinarian.



The goal of **Surgical Treatment** is to alter the anatomy of the hip joint and either improve the fit of the ball and socket joint or eliminate the arthritis that has developed. Determining the best procedure for each patient depends upon the following considerations:

1. The age and expected adult size of the pet.
2. The athletic expectations of the patient.
3. The degree of changes already present within the joint.
4. The owner's desires, abilities and commitment to the pet.

The surgical treatment options available include:

Triple Pelvic Osteotomy (TPO)

Typically, TPO is performed on patients four to seven months of age. The challenge is identifying patients at this age that are showing clinical signs to alert us to their condition. The procedure involves cutting the pelvic bones which support the acetabulum (or socket portion of the joint), allowing the surgeon the change the orientation of the joint and create a better fit. This procedure is best performed on these young patients because they are not skeletally mature and the continued growth of the bones combined with the change in orientation actually remodels the joint. The success of this procedure depends upon how well the joint remodels after surgery. Therefore, patients being considered for TPO must meet certain criteria. Even patients who are good TPO candidates have the potential for needing additional surgery in the future, if we do not get the expected improvement and remodeling post-operatively.

Femoral Head Osteotomy (FHO)

This procedure can be performed on pets of any age and with any severity of hip dysplasia. The FHO procedure involves making a cut in the bone to remove the head of the femur (or ball portion of the joint), creating a flat surface within the joint. An implant is not placed, nor is there a true bony attachment between the upper portion of the femur and pelvis. The FHO procedure creates a pseudoarthrosis, or false joint between the bones. This procedure provides better results in small and medium sized pets versus the large or giant breeds and/or athletic pets. This procedure is, in some respects, a type of salvage procedure as it preserves limb function at the compromise of some physical abilities. FHO patients typically have a slight hitch to their gait, and have some reduction in athletic ability. This procedure, however, is an economical way to preserve use of the limb and decrease the pain associated with hip dysplasia. Once an FHO has been performed, other, more advanced types of hip dysplasia surgical procedures cannot be performed.



TPO

FHO

Total Hip Replacement (THR)

This procedure can only be performed on patients who are skeletally mature - typically eleven months of age or older. The THR procedure provides the best results and preserves the most athletic ability of all of the hip dysplasia surgical options. Total Hip Replacement involves removing both the ball and socket portions of the joint and replacing them with new, prosthetic implants and is very similar to human hip replacement procedures. The implants are placed in one of two ways, either using bone cement or a biologic/ingrowth (cementless) system where the implants are coated with a porous titanium that allows the bone to grow into the implant. The Cementless, or biologic/ingrowth system, is highly recommended in younger patients as it has a greater longevity versus the cemented system since the bone actually grows into the implant, and it has less potential for long-term complications. The Cemented system does still provide excellent results for patients who, because of bone conformation, may not be candidates for a Cementless system or those looking for a more economical Total Hip Replacement. If complications arise or THR does not meet expectations for a particular patient, FHO can still be performed if needed.



THR