

## Will my dog need special care after surgery?

After surgery, most animals will spend 2-3 days in hospital, and will then require special care at home. This varies with each surgery, and may include a special area for confinement, dietary changes, controlled exercise programs, physical rehabilitation, and nursing care.

The Companion Animal Rehabilitation Center, (CARE) is located within the LSU-SVM. The Center provides physical rehabilitation, working with the owner and pet together for the best outcome. This may include under-water treadmill, therapeutic ultrasound, kinematic gait analysis, electrical stimulation, and various types of therapeutic exercise. Please visit [www.vetmed.lsu.edu/vth&c/CARe.htm](http://www.vetmed.lsu.edu/vth&c/CARe.htm).

## What are the costs of the different treatments?

The costs of surgery vary greatly with each procedure. Information regarding cost of surgery is obtained from your surgeon. Please discuss this at the time of your initial visit.

## How do I make an appointment at the School of Veterinary Medicine?

The contact details for the LSU-SVM are:

School of Veterinary Medicine

Louisiana State University

Skip Bertman Drive

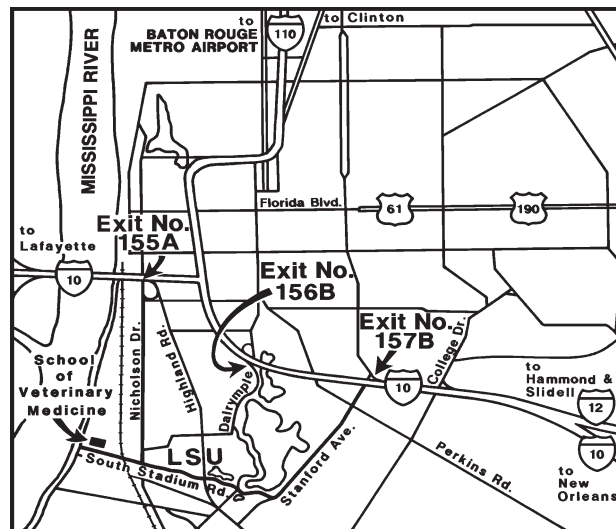
Baton Rouge, LA 70803

(225) 578-9600

FAX (225) 578-9916

The opening hours are Monday to Friday, 9am to 5pm. A referral is required from your primary veterinarian.

**The hospital is open 24 hours a day, all year around, for emergencies.**



School of Veterinary Medicine

# Canine Hip Dysplasia



CLIENT INFORMATION  
BROCHURE

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Louisiana State University  
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(225) 578-9900  
[www.vetmed.lsu.edu](http://www.vetmed.lsu.edu)

## What is Hip Dysplasia?

Hip dysplasia is a very common orthopedic disease. Hip dysplasia means that the hip joints have not formed properly as the dog is growing. The hip is a ball-and-socket joint, and if it is malformed then the joint is loose. Hip joint looseness (laxity) causes abnormal wear of the femoral head (ball part of the joint) and the acetabulum (socket) resulting in arthritis.

The exact cause of hip dysplasia is unknown, but it is proven to be inherited. Dogs with hip dysplasia should not be used for breeding.

## What signs will be seen in a dog with hip dysplasia?

Signs may be seen as early as 3-4 months or may not be apparent for years. Many dogs are very good at hiding the signs of painful hips. Signs may include reluctance to run and jump, exercise intolerance, hind-limb stiffness after exercise, abnormal gait (bunny-hopping), or a 'clicking' sound when walking. Both hips are usually affected, although one may be worse.

## What tests will my veterinarian do to look for evidence of hip dysplasia?

If you are concerned that your dog may have signs of hip dysplasia, please check with your veterinarian. He or she should examine the dog and take X-rays, which may show varying degrees of hip joint laxity and other

**In order to have your pet seen by a veterinarian at the School of Veterinary Medicine, a referral is required from your primary veterinarian. This will include bringing a referral letter, pertinent history and any radiographs to your appointment.**

conformational abnormalities if hip dysplasia is present. Secondary changes such as osteoarthritis may also be seen and can range from mild to severe. If the X-ray changes are apparent, a diagnosis can be made immediately; however, if no changes are seen on standard X-rays in a young dog, radiographs might have to be repeated at an older age to more definitively rule out the presence of hip dysplasia. LSU-SVM offers Penn HIP radiographic assessment of hip dysplasia, an X-ray technique which requires special training, and this technique can be used as an early screening test in at-risk puppies (greater than 4 months of age). Another hip scoring system, Orthopedic Foundation of Animals (OFA), is used in dogs older than two years of age.



## What treatment options are offered by LSU-SVM?

It is important to understand that the degree of radiographic change does not always correlate with the severity of clinical signs. Some dogs may have severe radiographic changes with minimal signs of pain. Dogs should be treated based in clinical signs, not radiographic changes. Often, a second opinion or referral can be made with a surgical specialist.

LSU-SVM has 5 specialist surgeons who are board certified by the American College of Veterinary Surgeons (ACVS). Our surgeons offer a number of different options for treatment, depending on the age of the patient, severity of disease, and owner preferences. The surgeon will discuss the options including risk, potential outcome and costs with you in detail at the time of your appointment.

### Non-Surgical Management

**Non-surgical management** includes the use of non-steroidal anti-inflammatory drugs (such as Rimadyl,

Metacam, or Deramax), controlled exercise, weight-management and disease-modifying osteoarthritis agents (DMOAs; such as chondroitin sulfate and glucosamine). Nutrition plays an important role in disease progression. Young, large-breed dogs should be fed a special diet designed for their needs.

### Juvenile Pubic Symphysiodesis (JPS)

In very young dogs (< 16 weeks) that are at risk of developing hip dysplasia a prophylactic surgical procedure called a JPS can be done. This is a relatively new technique with promising results. The pubic symphysis is fused causing the hip joints to rotate outward as the dog grows. Joint rotation reduces hip laxity and improves joint conformation. This procedure is only for non-breeding dogs that are going to be sterilized; both procedures can be done at the same time. JPS is expected to ameliorate clinical signs of hip dysplasia at a later date.

### Triple Pelvic Osteotomy (TPO)

In young dogs that have painful hips and hip dysplasia (without arthritis), TPO is offered. The pelvic bone is cut in three places allowing the socket to be rotated so the ball fits in more deeply. The goal is to improve joint congruency and minimize the development of arthritis. Both hips may be operated, but are usually done 3-6 weeks apart. Exercise must be strictly limited until the bones are healed, which can take up to 8 weeks for each side. This may be in a small pen or kennel, with short leash walks only. This procedure is meant to be a proactive technique to minimize the joint changes associated with hip dysplasia, and most dogs are permanently improved after the procedure is performed, but it does not eliminate the possibility that secondary changes might worsen over time making other management techniques necessary at a later date.



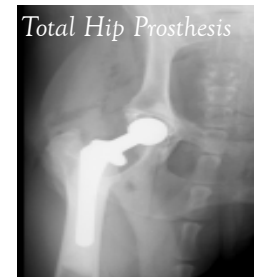
X-ray after TPO surgery

### Femoral Head and Neck Osteotomy (FHO)

An FHO is a salvage procedure that can be done on a dog of any age. This is a simple procedure that involves removing the femoral head (ball part of the hip joint). This eliminates abnormal contact between the two bones making up the hip joint, which causes a lot of the pain associated with hip dysplasia. Fibrous (scar) tissue forms at the site, creating a false joint. An FHO will often alleviate the pain associated with hip dysplasia, but animals may still have an abnormal gait. Activity and physical rehabilitation are very important for a successful recovery after the surgery (see below). This procedure is less costly than a total hip replacement, but prognosis for return to function is not as favorable.

### Total Hip Replacement (THR)

In mature dogs (greater than 1 year of age) with clinical signs of hip dysplasia, a THR may also be performed. The procedure entails replacing the abnormal joint with a prosthesis. The entire hip joint is replaced by removing the natural ball and socket, and putting a metal ball and polyethylene socket in their place. This eliminates joint pain and restores normal hip function.



Total Hip Prosthesis

Results are typically good and often only one side needs to be operated. Return to function may be quite soon after surgery, but activity is restricted for 2-3 months to allow the tissues to heal and the hip muscles to gradually strengthen, to prevent premature loosening of the implant.