

Hip Dysplasia – Triple Pelvic Osteotomy

Surgery Service



**Michigan Veterinary
Specialistssm**

www.michvet.com

We Can Help

Available Services

- 24/7 Emergency & Critical Care
- Cardiology
- Computed Tomography
- Dermatology & Allergy
- Internal Medicine
- Interventional Radiology
- MRI
- Neurology
- Neurosurgery
- Oncology
- Oncologic Surgery
- Ophthalmology
- Orthopedic Surgery
- Radiology & Fluoroscopy
- Soft Tissue Surgery
- Ultrasound

Locations

Auburn Hills

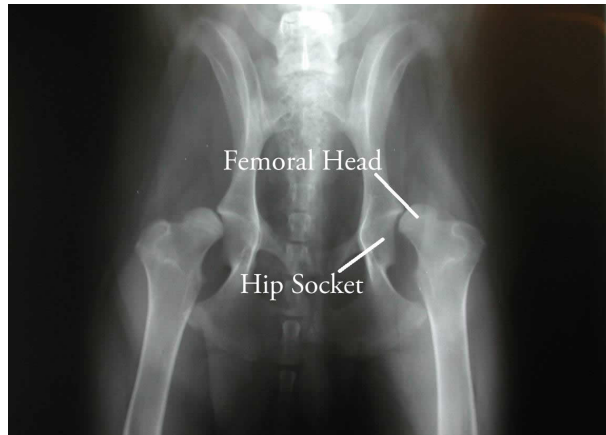
3412 E. Walton Blvd.
(West of Squirrel Rd.)
(248) 371-3713

Grand Rapids

1425 Michigan St. NE
(East of Fuller Rd.)
(616) 284-5300

MVS Southfield

29080 Inkster Rd.
(North of 12 Mile Rd.)
(248) 354-6660



What is hip dysplasia?

The hip joint attaches the hind limb to the body. This joint is a ball and socket that is held together by muscles, joint capsule and a ligament. The inside of the joint is covered with glistening cartilage that allows the joint to move smoothly. The joint fits tightly and remains in the socket during rest and play.

Hip dysplasia is a condition in puppies that begins with looseness of the supporting muscles, ligament and joint capsule of the

hip. As the ball separates from the socket, the joint gradually becomes deformed and no longer fits well together. With time, arthritis of the hip develops. Although defective genes cause hip dysplasia, limited food consumption frequently will slow the growth of affected puppies and prevent the development of this condition.

Signs

Dogs are commonly 5 to 8 months of age when signs first appear. Any breed can develop this condition, however large breeds are most commonly affected. Some dogs, however, are quite geriatric when the problem is found. Warning signs of hip dysplasia may include an awkward gait that is frequently dismissed as “a clumsy puppy”. Waddling of the hind quarters when walking, bunny hopping, stiffness when first getting up from a nap, a clicking sound heard from the hind end, lameness on one or both hind limbs, shortened stride of the hind limbs, exercise intolerance, and pain upon petting the hip region are clinical signs that also can be seen by pet owners. Signs that your veterinarian may pick up include pain on extending or spreading the hips apart. Your veterinarian may also detect looseness of the hips called the Ortolani sign. In some cases this abnormality can only be detected when your dog is sedated.

Diagnosis

The diagnosis of hip dysplasia is based on the evaluation of x-ray images of the pelvis. In order to obtain properly positioned x-ray images, your dog may need to be sedated. Only looseness of the hip joints may be seen on the x-ray image in young dogs. As the dog matures, the affected joints develop bone spurs, a sign that the hips are degenerating.

The day of surgery

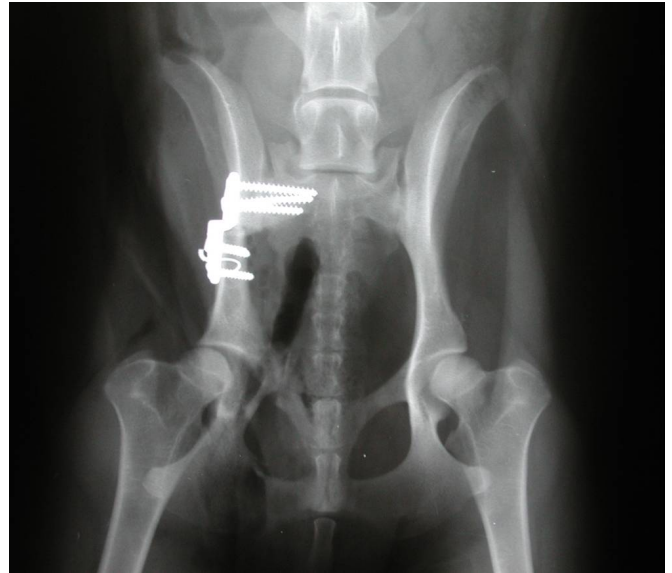
Our anesthesia and surgical team will prescribe a pain management program, both during and after surgery that will keep your companion comfortable. This will include a combination of general anesthesia, injectable analgesics, epidural analgesics, oral analgesics and anti-inflammatory medication.

Triple Pelvic Osteotomy Continued...

Surgery

A **triple pelvic osteotomy (TPO)** is performed to relieve pain, restore function, and stabilize the hip joint so it will develop more normally. Studies in humans and in dogs show that early correction of abnormal weight-bearing forces across the joint in a patient afflicted by hip dysplasia results in a more "normal" joint. The objective of the **TPO** procedure is to stabilize the hip joint and prevent the progression of debilitating arthritis. Hip dysplasia must be detected early in the course of the disease before significant joint damage occurs for the TPO to be effective. **TPO** is ideal for dogs that are between 5 to 12 months of age that have evidence of minimal to no arthritis on x-ray images.

During the **TPO** procedure, three cuts are made in the pelvis and the hip socket is rotated over the head of the femur bone.



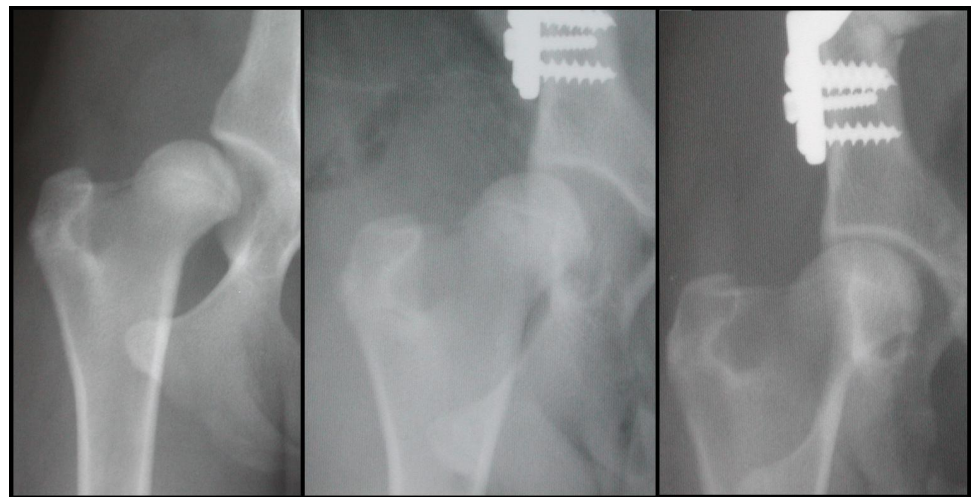
A specialized plate and screws are used to secure the pelvis in place. During the healing process, the femoral head becomes seated deeply within the hip socket. As a result, the femoral head no longer pops in and out of the joint when your companion is runs and plays.

Aftercare and results

After surgery, you can continue to give your pet a prescribed pain reliever to minimize discomfort. It's also extremely important to limit your dog's activity and exercise level following TPO surgery. Rehabilitation exercises can be done at your home or if you choose, by professionally trained therapists at an animal rehabilitation center. Rehabilitation therapy should be continued until your dog is bearing weight well on the operated limb (typically 2 - 4 weeks after surgery).

The healing process will be monitored by the surgeon with at least two to three follow-up exams. Most dogs are weight-bearing on the operated limb the next day after surgery. By 2 to 3 months after surgery your companion should make a complete recovery.

Most dogs that have hip dysplasia will require that the opposite hip receive the TPO surgery and this is typically performed within 2 to 4 weeks after the first surgery. Potential complications of the triple pelvic osteotomy may include progression of severe arthritis, damage to the sciatic nerve of the hind limb, infection, loosening of screws and damage of the urethra (tube that passes urine from the bladder to the outside). In general, about 90% of acceptable candidates that undergo the TPO surgery achieve full limb function and return to athletic activities.



Triple Pelvic Osteotomy Continued...

Assessment and recommendations

Patient: _____ Date: _____

Treatment

- Surgery is recommended

The following has been prescribed

- No medications or special diet are necessary at this time
 Prescription joint diet: _____
 Neuroceutical: _____
 Nonsteroidal anti-inflammatory medication: _____
 Other medication: _____

Exercise

- Unlimited
 Confine your pet to the house other than very short leash walks necessary for bowel movements and urination
 Restrict exercise to leash walks 10 minutes twice daily

Preparation for surgery

- Start fasting your companion at midnight before the surgery; water should not be withheld
 Give Pepcid AC 10 mg tablets: _____ tablets with water (if needed use a syringe) at 6 AM on the day surgery

*Composed by Daniel A. Degner, DVM, DACVS
Edited by Ned F. Kuehn, DVM, MS, DACVIM*



**Michigan Veterinary
Specialistssm**

www.michvet.com