

When Your Pet Needs a Total Hip Replacement

Here is What to Expect

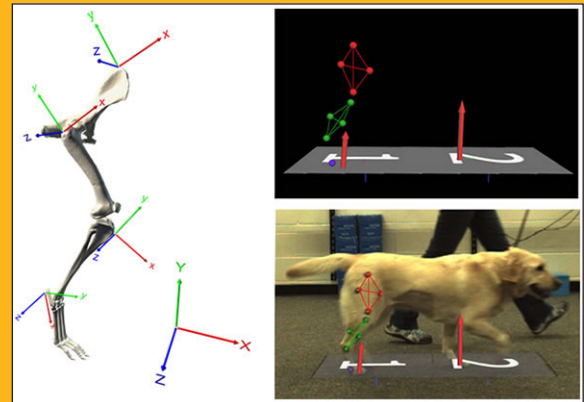
Initial Consultation

A complete history and full physical (orthopedic, neurologic, and dermatologic) examination will be performed. At this time, we will conduct a complete gait analysis and perform sedated x-rays (radiographs) to assess your pets' candidacy for a Total Hip Replacement (THR). Full blood work will also be performed at this time to identify any conditions that would preclude surgery. Based upon these physical exam and diagnostic findings, the available management strategies for canine hip dysplasia will be discussed with you. This may or may not include Total Hip Replacement. The costs of the initial consultation, surgery, and follow up are as follows: \$1,500-\$2,000 (initial consultation and diagnostics), \$7,000-\$8,500 (THR surgery), \$550-\$600 (each of the follow-up examinations: six week and 12 week).

Total Hip Replacement

THR is widely considered to be the gold standard treatment for large-breed patients with severe hip dysplasia. This is especially true for patients where medical management is or has become ineffective. The goal of a total hip replacement is to restore normal function to the hip joint, and alleviate the pain and discomfort associated with hip dysplasia. The procedure is performed by removing both the ball (head of the femur) and socket (acetabulum) of your dog's hip joint and replacing them with a combination of metal (titanium) and plastic (ultra-high-molecular-weight polyethylene) implants. Currently, several types of hip replacements are available for use in dogs. These include cemented

implants, cementless implants, and a hybrid combination of the two. Our surgeons are experienced in all of these THR systems, and this allows us to choose the best THR procedure for an individual patient. A recent technological advancement to THR surgeries is the BFX Lateral Bolt system. Because of this system, our surgeons have been able to transition to mostly cement-less THR procedures. The BFX Lateral Bolt system is



THR Gait Analysis

The Motion Analysis Laboratory at the University of Missouri Veterinary Health Center is the only veterinary laboratory of its kind in Missouri and is one of the most advanced veterinary motion analysis facilities in the United States.

The Motion Analysis Laboratory is designed to aid veterinary professionals with the evaluation, identification, and treatment of patients with musculoskeletal musculoskeletal injuries or diseases — including patients who are being evaluated for a total hip replacement.

BFX Lateral Bolt

Developed as a stabilizer to the Universal Hip System by Biomedtrix, the threaded bolt locks into the femoral implant to decrease the chance of implant movement during the early postoperative period.



Small Animal Orthopedic Surgery

Veterinary Health Center
University of Missouri

MU Orthopedic Update
July 10, 2019

based on biologic fixation of bony ingrowth into the implant for the long-term stabilization. This specific implant was designed to help reduce femoral stem movement during the early post-operative period when patients are at the highest risk for complications (Wendelburg 2018).

Timing of Surgery

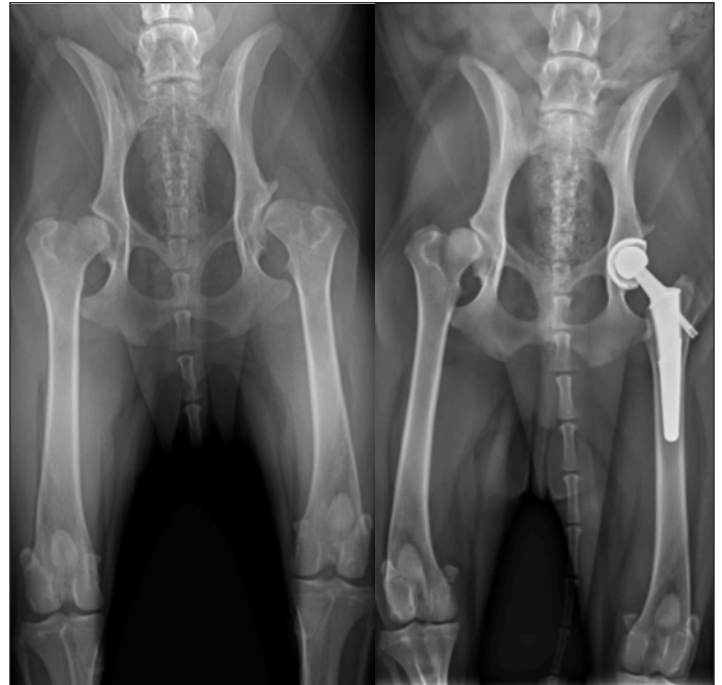
If your dog is a surgical candidate, a second appointment will be scheduled approximately eight to 10 weeks later, at which time the total hip procedure will be completed. During the interim, you will be asked to perform several tasks to ensure sure your dog is the best candidate possible. In the week prior to surgery, you will be asked to have a urinalysis performed by your veterinarian to make sure that your pet does not have a urinary tract infection. You will also be asked to perform medicated (chlorhexidine) baths on your dog during the weeks prior to surgery. These steps are critical to ensure the best outcome for your pet following THR surgery.

Surgery

THR surgery is performed in the mornings and takes between two and three hours, depending on the severity of hip disease present in your dog. Anesthesia will be overseen by a board-certified veterinary anesthesiologist and all total hip replacement procedures are performed by veterinary orthopedic surgeons who are board certified by the American College of Veterinary Surgeons (ACVS). After surgery, your dog will recover in our Intensive Care Unit (ICU) where they will receive 24-hour monitoring, IV fluid administration, and medication for pain control. While in ICU, their care will be overseen by our surgeons along with a team of veterinarians who are board certified in veterinary critical care.

Postoperative Care

Following THR surgery, dogs remain in the hospital for one to three days. This can vary between patients; however, most dogs will be discharged the day after surgery. At discharge you will receive post-operative care instructions that outline strict activity restriction for three months after surgery. We will perform a recheck examination with sedated x-rays (radiographs) and gait analysis at six and 12 weeks postoperatively. Based on your pet's progress, activity restrictions will be modified. In most cases, dogs that have received a THR can return to normal activity approximately four months after surgery.



Risk of Complications

As with any elective orthopedic surgery, there is a risk of complications. With a total hip replacement, those risks include, but are not limited to, hip luxation, implant loosening, femoral fracture, infection and nerve damage. The overall risk for serious complication varies depending on studies performed, but is somewhere between 5 and 10%.

Future Care

Because the total hip replacement implants are designed to give comfort to your dog for the rest of its life, there are some special considerations that should be remembered. First, your dog will have permanently placed metallic implants, which can trigger metal detectors. Secondly, any time your dog has a dental procedure, or anytime your dog may have a systemic bacterial infection, they should be placed on broad-spectrum antibiotics for several weeks. This is to help prevent bacteria from taking residence on the hip implants. If there are questions or concerns regarding these please consult with your primary veterinarian.

References

Wendelburg K. *Clinical Experience with a Lateral Bolt Total Hip Replacement System [abstract]*. In: *Proceedings of the American College of Veterinary Surgeons Surgery Summit; 2018 October 25-27; Phoenix AZ, ACVS; 2018. Pg. 336.*