Postoperative care following femoral head and neck ostectomy

The hip joint is a ball and socket joint which allows a great degree of motion. The ball component of the joint is called the femoral head which is connected to the shaft of the femur by the femoral neck. The socket component of the joint is called the acetabulum. A femoral head and neck ostectomy is a surgical procedure where the femoral head and neck is removed (see diagram). The procedure is performed when hip joint disease results in continuing pain and other methods of treatment are not feasible or will not produce the desired results. Diseases such as chronic arthritis secondary to hip dysplasia or trauma are examples which can result in continuing pain and necessitate surgery. When the femoral head and neck are removed the pain from the pressure on the joint capsule and cartilage is relieved. The patient forms what is called a pseudoarthrosis (false joint) which is composed of fibrous (scar) tissue. The degree of limb use following surgery varies between patients from normal to a continued limp. Even if the patient does not return to full use of the limb, the limb will be more pain free following surgery. As a rule small dogs and cats function very well after surgery. The larger the patient the less predictable the final result, but generally the animal will function better after surgery than before.

Postoperative care and physical therapy are extremely important for a favorable outcome. Initially the sutures and incision should be observed daily. If the area begins to drain, becomes reddened or the patient licks at the incision excessively, please contact your veterinarian immediately. The skin sutures are removed 10-14 days following the surgery. Pain relief can be given in the form of an anti-inflammatory medication. Please ask your veterinarian for a specific dosage for your dog.

Physical therapy may begin immediately and is very important for maximum return of limb function. Passive flexion and extension of the hip joint after surgery is one form of therapy. This is accomplished by gently moving the knee forward toward the head and then reversing the action moving the knee toward the tail. The range of movement should be minimal initially and gradually increased to the maximum the dog will allow by the end of the therapy session. Ten minute sessions 3 times daily are recommended. Another excellent form of physical therapy for dogs is swimming. This is not recommended for cats. Swimming should begin approximately 2 weeks following surgery once the incision is healed and sutures are removed. The bath tub will suffice for small dogs but larger dogs require a pool or similar body of water. Two sessions each day for 15 minutes per session is recommended. Allow the patient to paddle in the water, this will exercise the limb and joint. This exercise will increase the range of motion and strength in the joint, as well as the patient’s confidence in using the leg. One other excellent method used to improve limb function is to hold the front paws and force the patient to stand on the hind limbs only and walk the dog backwards. This will increase the strength of the rear limb and range of motion in the hip.

Supervised exercise is recommended to encourage the patient to use the limb. Initially short slow walks on a leash are recommended. With time and increasing limb strength more vigorous exercise can be instituted such as jogging and running. The convalescent period following this surgery can be as long as 3-4 months. Do not become discouraged with your pet’s progress too early, but please call your veterinarian if you are concerned or have questions.