Postoperative care following triple pelvic osteotomy

The hip joint is a ball and socket joint with the ball component arising from the femur and the socket component arising from the acetabulum. Hip dysplasia is a common developmental problem involving excessive laxity between the ball and socket component of the hip joint. A triple pelvic osteotomy is a surgical procedure utilized in young dogs with clinical signs of hip dysplasia and laxity. This procedure provides stabilization of the hip joint by rotating the acetabulum (socket) to capture the femoral head (ball) and stabilize the loose joint. Triple pelvic osteotomy involves three separate incisions and cuts in the bones of the pelvis (ilia, ischium, pubis) to axially rotate and stabilize the hip joint in its new position. The bone is fixed in its corrected position with a stainless steel bone plate, screws, and wire (see diagram below).

Your part in the postoperative care is as important as the surgery itself. You have invested a substantial amount of money in your animal and it is to your benefit to do everything possible to protect this investment and the well being of your companion. Small degrees of movement at the osteotomy (bone cut) sites may hinder the healing process. Of course the purpose of the implant is to prevent this movement, but if the patient is allowed too much activity too soon, movement at the osteotomy site will occur. In fact, the implant may loosen or break with continued stress and the benefit of the surgery will be lost.

General care of the patient is important and the skin incision should be checked daily for signs of irritation or drainage. If problems are noted with the surgical site contact your veterinarian immediately. Occasionally a patient will excessively lick the sutures. This in itself will cause irritation and drainage. If this occurs, an Elizabethan collar (looks like a lamp shade) may be required. Sutures can be removed 10-14 days following surgery by your veterinarian. Occasionally these patients may experience difficulty urinating for several days following surgery. It is important that you note normal urination habits following surgery and to contact your veterinarian immediately if there is any evidence of difficulty urinating. Radiographs are recommended 4 weeks following the procedure to assess healing at the surgical site.

Early in the post operative period, the pain and discomfort your animal experiences will cause it to limit its own activity. However, as the swelling and pain decreases (generally 2-4 weeks) your animal will want to increase its activity. It is extremely important to remember that the bone has not healed at this time and most stresses are still absorbed by the implant. You must continue enforced rest and supervised exercise. As a rule of thumb you should restrict your pet’s exercise to short leash walks only for 12 weeks following surgery. When the animal is unsupervised it should be confined to a crate or small room to limit running and jumping. We realize that enforced rest becomes more difficult as healing progresses, but you must continue this practice for 12 weeks, at which time most osteotomy sites are completely healed. The most common complication noted with this procedure is implant loosening, with an increased incidence of implant loosening directly related to the amount of activity allowed the patient in the recovery period.

If indicated, the opposite side can be operated on as early as 4-6 weeks following the initial operation. The initial TPO site will not be completely healed at this time but waiting too long to perform the surgery on the other side could result in a hip that is no longer an acceptable candidate for the procedure. The majority of animals have excellent long term function following a triple pelvic osteotomy to manage hip dysplasia.

Twin Cities Veterinary Surgery