

Purpose of Procedure

Limb (leg) amputation is the removal of a portion of a limb. Dogs and cats, in general, function extremely well following amputation. Poor candidates for amputation include very large dogs, obese dogs, and dogs with orthopedic or neurologic disorders that affect the other legs.

Amputations may be performed for numerous reasons, including trauma, infection, and cancer. Certain neurologic diseases (paralysis of one or more nerves to the leg) and severe, painful osteoarthritis (degenerative joint disease) may also be treated by limb amputation. In some instances, such as trauma or bacterial infection (osteomyelitis), amputation is curative. In cases of bone tumors, amputation is done to relieve pain but rarely cures the underlying cancer.

Description of Technique

Amputation of the front leg is generally performed by removing the entire limb and scapula (shoulder blade). This approach results in a good cosmetic result. Amputation through the shoulder joint or at the level of the upper arm is generally of no benefit and less cosmetic. Amputation of the rear limb is usually done at the level of the mid-thigh. This approach results in a more cosmetic appearance and affords some degree of protection to the groin. When neoplasia (cancer) or infection involves the femur (the long bone of the thigh), amputation through the hip joint is done. Amputation at a point lower on the leg (front or rear) is rarely done, because prosthetic devices are not usually available, are very expensive, and are generally unnecessary.

Preparation of Animal

Radiographs (x-rays) of the limb and routine laboratory tests are usually recommended initially to further define the nature and extent of the limb problem and identify anesthetic risks, such as liver or kidney dysfunction. Other diagnostic tests are based on the suspected underlying condition or cause of the lameness. If trauma or cancer is suspected, chest x-rays are taken.

Potential Complications

Although rare, the most serious complication that can occur during amputation is severe bleeding. Other complications include failure of the incision to heal properly or premature opening (dehiscence) of the incision, infection at the surgical site, and recurrence of cancer at the incision site. Painful neuromas where the limb nerves were severed during the procedure and phantom pain after the amputation are extremely rare.

Postoperative/Follow-up Care

Upon discharge from the hospital, restricted exercise (leash walking) is usually prescribed until the surgery site has healed. Notify our veterinarians if any swelling or excessive redness occurs at the surgery site or if there is any drainage from the incision. Pain-relieving medications are commonly dispensed when the animal is discharged. Depending on the reason for the amputation, antibiotics may also be prescribed. Chemotherapy for treating cancer is often delayed until the incision has healed.

Follow-up consists of removal of the sutures or staples when the skin is fully healed, generally 10-14 days after surgery. Other postoperative instructions are tailored to address the underlying reason for the amputation.