Amputation

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Limb amputation is a surgical procedure commonly performed in dogs to remove a diseased or injured limb, either front or rear. Amputations may need to be performed in animals with disease processes on a leg that cannot be treated in any other way. If the remaining legs are healthy, animals that undergo an amputation usually resume near-normal activity and can have an excellent quality of life. They are able to run, walk, and play without pain or discomfort. Dogs do not suffer the psychological distress of losing a limb the same way a human does. The primary purpose of the limb is in movement. Because dogs do not need to perform fine motor skills they easily adapt to having only three legs. Even very heavy dogs do well. Click on our website link “Letters of our clients” to view a movies of dogs that had amputations. Toes can also be amputated if indicated.

Amputation is most commonly performed to remove tumors present in the soft tissues or bones of the leg. Severe nerve damage to one limb is another common reason for amputation. Non-reconstructable fractures, irreparable skin defects, and non-responsive, life threatening infection are also reasons for recommending limb amputation.

The surgical procedure consists of removal of the leg. For the frontleg, the scapula (shoulder blade) is removed along with the remainder of the leg. Hindleg amputations are performed either in the middle of the femur (thigh bone), or at the level of the hip joint, depending on the location of the lesion. Occasionally, part of the pelvis (hip bone) may have to be removed as well.

Alternatives to amputation: Amputation can be avoided in many cases of bone cancer by using limb sparing procedures. Limb sparing procedures involve removal of the diseased bone. This segment of bone is then replaced with a segment of bone from another dog or is replaced with metallic implants. In the forelimb, for example, osteosarcoma of the distal radius can be treated by excision of the bone and replacement with a bone graft, which is secured in place with a long metal plate and screws. This procedure is referred to as a limb-sparing surgery because it can result in a functional limb. Limb sparing is most appropriate for patients with compromise of the remaining limbs. When considering limb sparing surgery, it is important to remember the potential for complications such as implant loosening and infection of the allograft (bone graft).

Although not available at VSOA, dogs can be fitted with a prosthesis following an amputation, just like it is done in humans. For this procedure the amputation is performed lower down on the leg (below the elbow or knee) to leave an adequate stump for application of a carefully and specifically fitted prosthesis. Many dogs function well with a prosthesis. However, this procedure requires extensive pre-operative work up, and has been performed only at a couple of referral centers. We will be glad to coordinate referral to the appropriate facility if your pet is a candidate for prosthetic surgery.

After surgery: Proper postoperative care will reduce the risk of complications and will decrease your pets’ discomfort. Activity restriction is essential during the first 2-4 weeks after surgery. During this period, your pet should remain inside the house except for three brief “bathroom breaks” per day. Your pet should be on a leash or closely supervised during these breaks, to prevent excess activity. This will allow the incision to heal, and will decrease the risk for postoperative complications such as wound dehiscence, seroma formation, or infection. Your pet should not lick the incision, run, jump, rough-house, or play during this time. Antibiotics, pain medications, and anti-inflammatories may need to be given.
The prognosis depends on the underlying cause. Most animals ambulate very well after an amputation. If amputation is performed to remove a bone tumor the source of pain is eliminated and recovery is often surprisingly quick. If the tumor is not producing a significant lameness, if a dog is overweight, has other orthopedic problems such as hip dysplasia, or is an old pet, getting up and around after surgery may be more difficult and more support and encouragement may be needed. The amputation of one or two digits (toes) is usually associated with essentially normal gait.

Follow-up and recheck: The first recheck is usually performed one or two weeks after surgery. Skin staples typically are removed at the two week recheck and the healing process of the animal is evaluated. Depending on the underlying disease process, follow-up appointments may be necessary.

We hope that this information pamphlet was helpful to help you. Please do not hesitate to call or ask at your next appointment if you have any questions or concerns.

Your VSOAK Team