

LIMB AMPUTATION:

Front or rear, a major surgery, life change and decision.

**Synopsis—**

Limb amputation is often a salvage option for major limb disease, or rarely chronic injury. Patient acceptance of three-legged status is variable, and depends largely on personality, body condition, pre-operative lameness degree/duration and necessarily lifestyle. Owner acceptance of the three-legged pet solution varies with past personal experiences, anticipated lifestyle adjustments, necessary pet accommodations, life expectancy or prognosis for pet at time of disease/injury. Not all amputees “do fine”. They are not all “near normal”. Decision making about an amputation can be helped with demonstrating patient three-legged mobility preop with trials in Velpeau or Ehmer-like bandages.

The combination of “cancer” discussions with “amputation” discussions is quite overwhelming. Separating the two will go a long way toward improving the client experience in this decision making process.

Surgical Overview:

The leg is prepared using the "hanging leg prep" with clip margins extending from dorsal midline, down to the carpus/tarsus. The foot is wrapped in Vetwrap and suspended from overhead.

Forelimbs—amputation is by scapular disarticulation; a brachial plexus block under direct observation is applied; and skin closure is a curvilinear T shape over lateral chest. A padded chest wrap is applied.

Rearlimbs—amputation is by proximal femoral osteotomy or coxofemoral disarticulation (or rarely, partial pelvectomy) contingent upon location of lesion needing resection; a femoral and sciatic nerve block are applied under direct observation; and skin closure is a curvilinear incision along remaining gluteal stump. A topical “bandaid” is applied.

The **indications & rationale** for surgical treatment are:

- Bone or soft tissue tumor below the level of scapula or hip.
- Complex fracture or chronic non-union/malunion fracture
- Congenital or traumatic partial limb loss w/ poor function

Other options for treatment (*besides traditional “full” amputation*) are:

- Planned partial amputation in preparation for prosthesis (these will be very select cases, require significant owner coordination with a professional prosthetist and ongoing prosthetic management.)

The **perioperative experience** for pet and owner includes:

- (If polytrauma or overweight/obese; if acute lameness preop), a recumbent patient in need of significant assistance with walking and personal hygiene pre and postop.
- Bandage management (forelimb chest wrap or Thundershirt x 3wks)
- Pet confinement and pain when moving.
- Strict confinement to leash and small area of house (indoors) for restricted postop period.
- Steady improvement in mobility and reduction in pain over healing period (1-3mo) **Patient mobility training is significantly shorter with a longer injury/lameness preop history.
- Strongly advise, owners investigate and trial appropriate body sling/harness options.

Expectations for outcome are:

- Good for return to mobility, commensurate with health of remaining three legs and preop mobility
- Longer recovery period for older/geriatric and overweight/obese patients

Complications that may arise with this procedure are:

- Superficial or deep **surgical infection** (rare, requiring long course Abx),
- Incision dehiscence (rare, requiring bandage management or debridement/closure)

Postoperative **outcomes may be poor** due to the above complications, and/or:

- Poor patient mobility acceptance of three-legged status
- Metastatic disease
- Progressive joint disease in remaining limbs.

What a surgeon needs prior to surgery:

- Affected leg/body part “marked” by owner for confirmation (wax “costume makeup” works well)
- Skin near the surgery site CLEAR of infection (papules, pustules, crusts, collarettes, etc.) If urgent surgery, owner must be alerted to *increased risk* of incisional, deep infections.
- Two-view radiographs for surgical planning
- Appropriate chest/abdomen evaluations, in cases involving trauma or neoplasia

General considerations and complications for all surgery/anesthesia procedures are:

- *Difficult and/or painful anesthetic recovery (variable; may require additional medications or re-hospitalization)*
- *Incisional infections (rare, minor; usually require oral antibiotics)*
- *Incisional dehiscence (rare, minor or major; may require surgical revision)*
- *Adverse anesthetic event (rare, major; may result in serious impairment or death)*

Proper owner expectations are important to a successful experience and patient outcomes. Please discuss this information with your clients while assisting them with decision-making for **Limb Amputation**.

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