Robert Murray

B. Sc (Hons) Biomed, DVM (Hons), MRCVS

Complex Small Animal Surgery
Orthopaedic and Soft Tissue

- Complex Surgery
- Cruciate Disease
- Patellar Luxation
- Fracture Repair
- BOAS / TECA-LBO

Complex Lump Removal and Reconstructive Skin Flap Surgery Discharge Sheet

Procedure Summary

Your dog has undergone surgical removal of a skin or subcutaneous mass followed by reconstructive surgery to close the resulting wound.

When removing tumours, it is often necessary to remove a margin of apparently normal surrounding tissue to maximise the likelihood of complete excision and reduce the risk of local recurrence. Depending on the size, depth, and location of the tumour, direct closure of the surgical wound may not be possible without placing excessive tension on the skin.

Tumour excision is typically performed using a combination of monopolar electrocautery, sharp dissection, and scissor type harmonic scalpel technology. The harmonic scalpel uses ultrasonic energy to cut tissue and seal blood vessels simultaneously, helping to minimise bleeding, reduce tissue trauma, and maintain a clear surgical field during complex procedures.

Following tumour removal, reconstructive techniques may be required to achieve wound closure. Common reconstructive procedures include axial pattern skin flaps, which utilise a dedicated blood vessel to maintain blood supply to the transferred tissue, and Z-plasty techniques, which redistribute skin tension and facilitate closure of larger or more challenging defects.

The tissue removed during surgery may have been submitted for histopathological examination. This laboratory assessment helps determine the exact diagnosis, whether the mass is benign or malignant, whether complete surgical margins have been achieved, and whether any further treatment may be recommended.

Mild swelling, bruising, discomfort, and a small amount of blood tinged discharge are expected during the first few days following surgery. Reconstructive skin flaps often appear more swollen than routine surgical wounds and may develop temporary bruising or colour changes during the healing process

.

Robert Murray

B. Sc (Hons) Biomed, DVM (Hons), MRCVS

Complex Small Animal Surgery
Orthopaedic and Soft Tissue

- Complex Surgery
- Cruciate Disease
- Patellar Luxation
- Fracture Repair
- BOAS / TECA-LBO

Complications

Common and expected complications include mild swelling, bruising, discomfort, temporary redness around the incision, and small amounts of blood tinged discharge during the early healing period.

Occasional complications include wound irritation, local infection, delayed healing, seroma formation, minor suture reactions, or small areas of superficial wound separation.

Less common complications include significant wound breakdown, excessive swelling, prolonged wound drainage, delayed tissue healing, or the need for additional wound management procedures.

Flap necrosis is an important potential complication following reconstructive skin surgery. This means that part of the transferred skin does not maintain an adequate blood supply and becomes non-viable. If this occurs, the affected portion is often left in place initially, provided there is no serious infection or other urgent concern. This allows a healthy granulation tissue bed to form underneath the flap. Once the non-viable tissue has clearly demarcated, revision surgery may involve removing the necrotic dead tissue and continuing wound management until the area heals.

Rare but serious complications include complete flap failure, extensive tissue necrosis requiring further reconstructive surgery, recurrence of the tumour, incomplete tumour excision requiring additional treatment, or the need for referral level oncological management.

Although complications can occur following reconstructive surgery, careful surgical planning, meticulous tissue handling, preservation of blood supply, and strict post-operative management significantly reduce these risks.

Robert Murray

B. Sc (Hons) Biomed, DVM (Hons), MRCVS

Complex Small Animal Surgery
Orthopaedic and Soft Tissue

- Complex Surgery
- Cruciate Disease
- Patellar Luxation
- Fracture Repair
- BOAS / TECA-LBO

Medications

Medication	How to Give	Duration	Purpose
NSAID	Once daily with food	As prescribed	Pain relief and anti-inflammatory
Antibiotic	As prescribed	As prescribed	Infection prevention or treatment
Additional analgesia	As prescribed	Short course	Post-operative comfort

All medications should be given exactly as prescribed. Anti-inflammatory medications should be given with food and may occasionally cause vomiting or diarrhoea. If this occurs, contact the practice for advice. Do not administer any human medications.

Feeding and General Care

Normal feeding can usually resume on the evening of surgery unless otherwise instructed.

A highly digestible diet may be beneficial during the first few days following surgery. Fresh water should be available at all times.

Appetite may be slightly reduced for the first 24 to 48 hours following anaesthesia. This is generally normal and should gradually improve.

Some patients may benefit from smaller, more frequent meals during the initial recovery period.

Robert Murray

B. Sc (Hons) Biomed, DVM (Hons), MRCVS

Complex Small Animal Surgery
Orthopaedic and Soft Tissue

- Complex Surgery
- Cruciate Disease
- Patellar Luxation
- Fracture Repair
- BOAS / TECA-LBO

Activity and Exercise

Strict restriction of activity is required for a minimum of two weeks following surgery. Depending on the size and location of the reconstruction, a longer restriction period may be recommended.

Dogs should be kept on a lead at all times when outdoors, including in the garden, and exercise should be limited to short, controlled toilet walks.

Running, jumping, rough play, climbing stairs, chasing balls, and interaction with other pets should be avoided throughout the healing period.

Environmental management such as the use of stair gates, crates, pens, or confined areas may be helpful in preventing excessive activity.

Restriction of activity is particularly important following reconstructive surgery, as excessive movement can place tension on the wound, compromise blood supply to the flap, and increase the risk of wound breakdown.

Wound Care and Protection

The surgical site must be kept clean and dry and should not be bathed.

An Elizabethan collar, inflatable collar, or medical pet shirt must be worn at all times until advised otherwise. Even brief licking, chewing, rubbing, or scratching can cause significant damage to a reconstructive skin flap.

The incision should be checked at least twice daily for swelling, redness, discharge, opening, or changes in skin colour.

Mild bruising and swelling are expected during the early stages of healing.

The skin flap should ideally remain warm and pink. Small variations in colour may occur during healing. However, dark purple, grey, black, pale white, cold, or foul smelling areas of skin should be reported immediately, as these changes may indicate compromised blood supply or flap necrosis.

Do not apply creams, antiseptics, powders, ointments, or dressings unless specifically instructed by your veterinary surgeon.

Robert Murray

B. Sc (Hons) Biomed, DVM (Hons), MRCVS

Complex Small Animal Surgery
Orthopaedic and Soft Tissue

- Complex Surgery
- Cruciate Disease
- Patellar Luxation
- Fracture Repair
- BOAS / TECA-LBO

Monitoring at Home

Close monitoring is essential during recovery.

Your dog should remain comfortable, bright, and able to eat, drink, urinate, and defecate normally.

The appearance of reconstructive flaps often changes during the first few days after surgery. Mild swelling and bruising are expected and do not necessarily indicate a problem.

The surgical site should gradually improve over time. Any sudden deterioration in appearance should be taken seriously.

Daily photographs can be helpful for monitoring healing and identifying subtle changes, particularly if there are concerns regarding swelling, bruising, discharge, or flap colour.

Histopathology Results

If the mass has been submitted for laboratory examination, results are typically available within 7 to 14 days.

Histopathology helps determine the exact tumour type, whether the tumour is benign or malignant, whether complete surgical margins have been achieved, and whether additional treatment or monitoring is recommended.

These results will be discussed with you once available.

When to Contact the Practice Immediately

Contact the practice without delay if your dog develops excessive swelling around the surgical site, significant bleeding, persistent or increasing wound discharge, opening of the incision, a foul odour from the surgical site, increasing pain or discomfort, lethargy, weakness, collapse, reduced appetite, vomiting, diarrhoea, dark purple, grey, black, pale white, or cold areas of skin, or any sudden deterioration in the appearance of the flap.

Early intervention can often prevent more serious complications.

Robert Murray

B. Sc (Hons) Biomed, DVM (Hons), MRCVS

Complex Small Animal Surgery
Orthopaedic and Soft Tissue

- Complex Surgery
- Cruciate Disease
- Patellar Luxation
- Fracture Repair
- BOAS / TECA-LBO

Follow-Up and Prognosis

A post-operative examination is recommended within three to five days of surgery to assess flap viability, blood supply, comfort, and wound healing.

A further examination is usually performed approximately ten to fourteen days following surgery for wound assessment and suture removal where appropriate.

Additional re-examinations may occasionally be required depending on the complexity of the reconstruction and healing progress.

The overall prognosis depends upon the underlying tumour type, completeness of excision, tumour grade, tumour behaviour, and successful wound healing.

Most reconstructive skin flaps heal successfully and provide excellent long-term functional and cosmetic outcomes. If partial flap necrosis occurs, this can often still be managed successfully with appropriate wound care, formation of a healthy granulation tissue bed, and revision surgery where required.

Histopathology results will help guide any further recommendations regarding monitoring or treatment.

If you have any concerns at any stage, please contact your veterinary practice.

Robert Murray

Robert Murray
B.Sc (Hons) Biomed, DVM (Hons), MRCVS
Veterinary Surgeon