Universität Zürich[UZH]

Bandage or pressure sores: How to prevent and treat

M.C. Nolff

DECVS

Veterinary Surgery
29:488-498, 2000

Ischemic Bandage Injuries: A Case Series and Review of the Literature

DAVINA M. ANDERSON, MA, VetMB, PhD, Cert SAS, MRCVS, Diplomate ECVS
and RICHARD A.S. WHITE, BvetMed, PhD, DSAS (Soft Tissue), DVR, FRCVS, Diplomate ACVS, Diplomate ECVS

Objective—To determine the prognosis and distribution of ischemic injuries caused by inappropriate bandaging of the lower limb in dogs and cats.
Study Design—Retrospective clinical study.
Animal Population—Eleven client-owned animals, including 9 dogs and 2 cats with a history of injuries consistent with incorrect application of a bandage.
Methods—Medical records for dogs and cats referred to the Queen's Veterinary School Hospital with limb wounds between 1995 and 1999 were reviewed for clinical history and referring veterinary surgeons' reports, indicating that the injury was directly related to the application of a bandage to the limb.
Results—The indications for bandage application included 2 postoperative cruciate ligament ruptures, 2 lacerations, 3 internal fixations, an onychectomy, a shoulder dislocation, a dog bite, and a tendon strain. None of the patients had other body systems involved or underlying or concurrent diseases. Five different types of bandage were described (support, Robert Jones, pressure, splint, and Velpeau), and no particular age or breed was overrepresented. Of the 11 animals, 5 required full-thickness skin grafts, 3 had to have digits amputated, and 2 required limb amputations. Nine animals survived, but only 4 became fully functional on the affected limb.
Conclusions—Bandage-related injuries are potentially serious sequelae to a routine procedure. A guarded prognosis should be given when there is loss of deeper structures.
Clinical Relevance—A review of bandaging principles is presented. Method of application, choice of materials, and close monitoring of the bandage are important factors in preventing iatrogenic injury.

n=11 ischemic injuries

→ **Robert Jones, average bandage, splint, cast, velpeau**

Results

5 Skin Transplants

3 amputated toes

2 Amputated legs

2 dead patients

only 4 with normal function of the leg after ishemic injury

Reasons for ischemic injuries

- Not enough padding
- Wrinkles/ badage slippage
- Tourniquet effect
- Bandage applied with too much force
- > 30 mmHg = skin ishemia (50 mmHg muscle)

Soft-tissue injuries associated with cast application for distal limb orthopaedic conditions

A retrospective study of sixty dogs and cats

R. L. Meeson; C. Davidson; G. I. Arthurs
Department of Veterinary Clinical Sciences, the Queen Mother Hospital for Animals, Royal Veterinary College, London University, Hawkshead Lane, Hatfield, Hertfordshire, UK

Keywords
Cast, orthopaedic, soft-tissue, injury, complication

Summary
Objectives: Casts applied for orthopaedic conditions can result in soft-tissue injuries. The purpose of our study was to describe the nature and prevalence of such complications.
Methods: We performed a retrospective review of medical records of dogs and cats that had a cast placed for an orthopaedic condition between October 2003 and May 2009. The data were analysed and categorised.
Results: Of the 60 animals that had a cast placed, 63% developed a soft-tissue injury (60% mild, 20% moderate and 20% severe). Injuries could occur any time during coaptation, and an association with duration of casting and severity ($p = 0.42$) was not shown. Severe injuries took the longest to resolve ($p = 0.003$). Sighthounds were significantly more likely to develop a soft-tissue injury ($p = 0.04$), and cross-breeds were less likely ($p = 0.01$). All common calcaneal tendon reconstructions suffered soft-tissue injuries, but significance was not shown ($p = 0.08$). Veterinarians identified the majority of injuries (80%) rather than the owners. The financial cost of treating soft-tissue injuries ranged from four to 121% the cost of the original orthopaedic procedure.
Clinical significance: Soft-tissue injuries secondary to casting occur frequently, and can occur at any time during the casting period. Within our study, sighthounds were more likely to develop soft tissue injuries, and should therefore perhaps be considered as a susceptible group. The only reliable way to identify an injury is to remove the cast and inspect the limb.


Peha-haft
LATEX FREE
Peha-haft
Artiflex Natur
Artiflex Natur
5,0 cm
Casting Tape
Bande de resine
Binde für Stützverband
Benda per immobilizzazione
Venda para inmovilización
Kunststofgipsverband
Fixationsbandage
Bandage
Syntetisk kunstgips
Synteettinen kevytkipsi
Ligadura para Imobilização
Opaska syntetyczna sztywna
Könnyű műanyag gipsz
Fixaèní obvaz
Fixačný obväz
2 in x 4 yd • 5,0 cm x 3,6 m

- Padding between toes (all!)
- Respect physiological joint angles
- Casts and splits ALWAYS need a LOT of padding
- 50% overlap
- distal → proximal, proximal →distal, distal → proximal
- every layer full distance
- Olecranon/ Tarsus = add donuts / bandage windows
- change every 1-2days
  - if animal limbs, licks, change immediately


Paris

Druck = (N x T) / (R x W)

N= number of layers
T= force

} Moderate, but prevent slippage

R = radius of the limb
W= width bandage

} rather choose wider one

Universität Zürich[UZH]

Kleintierchirurgie

Biofilm-infected wounds in a dog

Elizabeth A. Swanson, DVM, MS; Lynetta J. Freeman, DVM, MS;
Mohamed N. Seleem, BVSc, PhD; Paul W. Snyder, DVM, PhD