



## HOW TO PROVIDE BANDAGE CARE AT HOME

### BACKGROUND

Many types of bandages are used in veterinary medicine to protect wounds as they heal. A simple bandage may be used as a barrier to protect moist tissues from infection or trauma. A wet-to-dry bandage helps draw contaminants such as sand, dirt, or debris out of damaged tissues. A Robert Jones bandage is a very thick, soft bandage used for immobilizing and supporting a fractured bone before surgical repair. A simple bandage may be combined with a splint for support of an injured limb. A cast is used for longer term supportive care.

The goal of bandage care at home is to keep the bandage intact and working properly and to protect the bandaged area from problems related to bandages being too tight, contaminated, or ineffective.

### GETTING STARTED

With any bandage, some basic guidelines should be followed to ensure proper healing. All bandages should be kept clean and dry to reduce the risk of infection, which is common and can spread rapidly when bandages become soiled or wet. Often your veterinarian may ask you to return to the clinic for regular bandage changes during the wound healing process. This will ensure that only clean and dry bandages are in contact with the wound. At home, the bandage must be protected from the environment, your recovering pet, and from other pets.

In addition to their protection, it is also important that bandages be placed properly in order to keep them on. An adhesive tape that is gentle on the skin may be used for anchoring bandages to skin or fur. If not applied originally, this can be added after leaving the veterinary hospital if it becomes necessary (bandage shifting or moving in a way that exposes the wound). However, a bandage that is slipping off or bunching cannot work properly and should be completely replaced. Careful observation is needed to ensure a bandage is neither too loose nor too tight (see below). A bandage that is too tight can cause problems ranging from mild discomfort to serious tissue damage.

Depending on your pet's age and energy level, bandage monitoring may require minimal care or very close and continuous observation. An Elizabethan collar ("E-collar") may be needed to keep a pet from chewing or pulling a bandage off. Avoiding outdoor exercise during this time will help keep the bandage intact and the area clean and dry. If a waterproof covering has been recommended to protect a bandage while outside (such as a plastic bag), this must be removed as soon as exposure to moisture is over and should never stay on for more than 1 hour.

A pet with a bandage and/or an E-collar should not be outside unobserved. One of the most common complications in wound repair is damage to bandages by otherwise well-behaved pets that were not being monitored.

### PROCEDURE FOR MONITORING THE BANDAGE

Bandages on limbs are the most difficult to keep clean and dry. Generally, keeping a pet indoors during recovery makes this task easier. Even if it is not wet outside, it is necessary to protect a bandage from being soiled. When going outside for an on-leash walk for your pet to urinate or defecate, you can protect a limb bandage by covering it with a plastic bag and securing it with

tape or a tie. This is meant for temporary use only and should be removed immediately upon returning inside. A plastic bag left on a bandage for too long (more than 1 hour) will eventually lead to perspiration and a wet bandage, which is prone to infection.

If your pet is trying to lick or chew the bandage when it is first put on, there are several commercial products available that can be applied directly to the bandage to help deter this behavior. These bitter-tasting formulas are available as sprays, gels, and adhesive strips. They should be applied to the bandage only, not to hair or skin where they can cause irritation.

To protect a bandage on the trunk of the body (shoulders, chest, abdomen, back), a protective outfit may be necessary. While many varieties are available commercially, a loosely fitting T-shirt knotted at the waist often works well.

If your pet is using his/her feet to scratch at a bandage or remove the E-collar, it may be helpful to fit the paws with socks or purpose-made booties. Medical cotton tape may be necessary to keep these in place. Be sure to provide secure footing and protection from stairs if your pet wears these socks in the house.

For a bandaged limb (front leg or back leg), toes are usually left exposed for examination when the bandage is placed by the veterinarian. Normally a dog or cat's toes are parallel to each other and point forward. Compare by looking at and feeling several of a pet's paws. Be sure that the toes on the bandaged limb have not become swollen or splayed (spreading apart) and are not cool to the touch. Monitoring for swelling can be accomplished by comparing two front paws or two back paws to each other to see if the bandaged paw is noticeably larger. Check for swelling of the toes, coolness, or new bluish discoloration at least once daily when a bandage is on. Swelling, bluish discoloration, or coolness of the toes in a bandaged limb are indications that the bandage is too tight. This can be a medically urgent situation because ongoing bandage tightness can lead to gangrene; therefore, if there is a suspicion of an overly tight bandage, you should return to your veterinarian immediately (within 12 hours) to have the bandage checked. It must neither be too tight nor too loose; looseness allows the bandage to rub and shift out of place. Regular attention to a bandage at home is the most

useful way for you to identify problems occurring underneath a bandage before these problems become serious. A veterinarian or veterinary technician can review with you which abnormalities to watch for before leaving the hospital.

When a splint or cast is placed, normal movement over time may result in rubbing against the skin at the edges of a splint/cast. Small loss of hair in this area may be unavoidable. However, it is important to bring this to the attention of your veterinarian before an abrasion develops (red and raw), as this is painful and may allow infection to begin. In most cases, this can be done by scheduling a recheck appointment to be seen within a few days.

An unpleasant odor emanating from a bandage, splint, or cast may indicate infection, and the bandage should be checked by a veterinarian promptly (within 24 hours).

If your pet does not stop trying to lick or chew the bandaged area, it may be because he/she is uncomfortable, the area is infected, or the bandage has changed over time. A prompt recheck examination is recommended (within a day). If no problem is encountered, a deterrent substance (see above) can be considered for application to the bandage.

## AFTERWARDS

Depending on the type of injury that led to the bandage being required, a bandage-changing schedule should be discussed with your veterinarian. Once the bandages are no longer needed, you should still monitor your pet to prevent excessive licking or chewing of the newly uncovered and healing area. Because a pet's tongue is covered with bacteria and other microbes that can infect a wound, it is important to prevent all licking at the wound because this delays the healing process.

## FREQUENTLY ASKED QUESTIONS

*My pet is with me all day. Why do I need to put an E-collar on him/her?*

A pet can remove a bandage and lick or damage the wound in a way that sets back healing by days or weeks in just a few seconds. An E-collar is extremely important because it can prevent otherwise unnecessary return trips to the vet. An E-collar provides continuous protection from chewing and licking. This method of protection is awkward at first, but it is a temporary measure only, and most dogs and cats adjust very well over time.

*How often do bandages have to be replaced?*

Specific instructions and schedules for bandage changes should be addressed by a veterinarian, because the frequency of bandage change is completely dependent upon the type and extent of the injury. Wounds that are deep and/or contaminated may require draining to heal. These types of bandages are changed more frequently, sometimes every day at first. Superficial wounds that are not draining may be kept safely bandaged for several days in a row. Bandages that are placed for support are often changed on a weekly basis. In all cases, bandages that are wet, soiled, or have an odor should be changed immediately.

*My pet's bandage is wet. How can I dry it?*

Bandages are often made of several layers of specific materials with different properties. Moisture soaks through all layers, and the layers closest to the skin (where moisture can trigger infection) are also the layers that do not dry well. Therefore, a wet bandage cannot be dried; it must be completely replaced. Drying and reusing bandage materials is never recommended, because it sets the stage for infection.