

BANDAGING TECHNIQUES

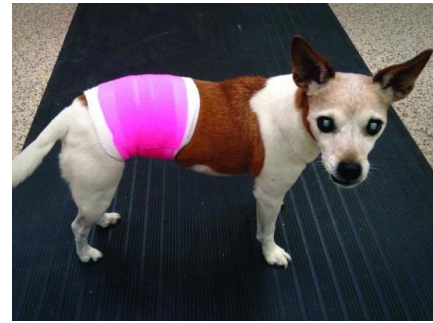
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1. Bandaging the Thorax and Abdomen

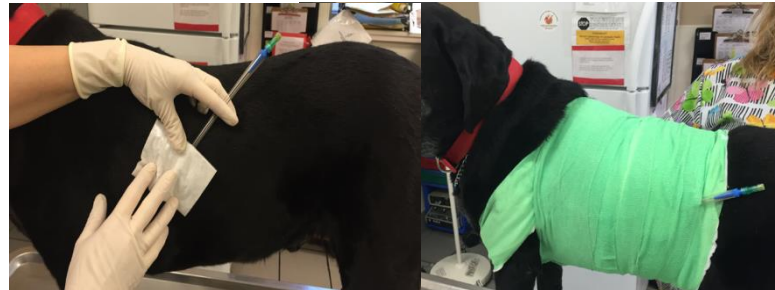
The thorax and abdomen often are bandaged to cover

- a. wounds,
- b. surgical incisions, or
- c. drainage devices.

These bandages should be applied firmly but without constricting the chest or abdomen. Abdominal pressure bandages occasionally are used when abdominal hemorrhage is suspected. Their effectiveness lasts only 1 to 2 hours, and they should be removed within 4 hours. When placing an abdominal pressure bandage, bandage layers should be applied firmly. A rolled towel can be placed along the midline to reinforce the bandage before tape is applied.



Apply an adherent or nonadherent contact layer over the incision or wound. Place several layers of sterile gauze sponges over the end of Penrose drains. Hold the contact layer in position with combine rolls, cast padding, or cotton. Use padding, gauze, and tape rolls 3 to 6 inches wide.



Wrap the padding circumferentially around the torso with slight pressure. Overlap each wrap by approximately one half to one third the width of the roll. Increase the thickness of the intermediate layer with increasing amounts of expected drainage.



Reduce rostral or caudal slipping of the bandage by wrapping the intermediate and outer bandage layers between the legs and over the shoulders or hips in a crisscross fashion.



Encircle the torso with one wrap of bandage material, then direct the bandage from the right inguinal area (axillary area) to the left perineal area (shoulder area).

Encircle the torso again and continue across the right perineal area (shoulder area), through the left inguinal area (axillary area), to the left flank (thorax). Repeat the crisscross pattern several times. Also reduce slippage by adhering 1/2 to 1 inch of tape to the hair.

Do not wrap the bandage so tightly that thoracic expansion is inhibited.

Hold the intermediate layer in place with elastic gauze (Kling) or stockinette.

Cut a length of stockinette (3 inches For cats and small dogs; 4 to 6 inches for medium and large dogs) slightly longer than the length of the body from head to rump. Cut small holes in the stockinette to accommodate the legs.

Place the stockinette over the head and pull the front legs through the leg holes before rolling the stockinette caudally. Pull the hind legs through the leg holes.

Secure the bandage with tape. In male dogs, cut a hole in the bandage to accommodate the prepuce or divert urine with a catheter to keep the bandage dry.

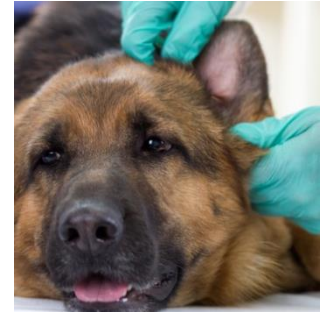
During bandaging manipulate the ends of tube drains so that they can be easily accessed for aspiration or infusion.



2. Bandaging the Head

Most head bandages are placed to

- a. protect an ear that has been traumatized or
- b. has surgical incisions. Similar bandages can be used to cover the eye.



Head bandages may interfere with breathing if they are applied too snugly or with neck flexion. A properly applied bandage should allow insertion of the fingers between the bandage and chin to allow room for neck flexion without airway obstruction.



If the bandage is too tight, an incision can be made partway across the bandage under the chin.

Leaving one ear out of the bandage helps to keep the bandage from sliding. Extreme caution should be used when removing the bandage to prevent laceration or amputation of the pinna.



Apply 7 -inch porous tape directly to the edge of the pinna to form a stirrup. Fold the ear over an absorbent pad or gauze sponges onto the dorsum of the head and wrap the tape around the head to secure the ear in position. Using a similar technique, pad and place the opposite pinna over the first pinna if indicated.



Place a nonadherent contact layer over an incision or gauze sponges over the end of a passive drain. Hold the pinna and contact layers in position with 2- to 3-inch cast padding or cotton roll.

Encircle the head, passing the rolls of bandage material cranial and caudal to the opposite ear unless both ears are immobilized. Starting under the chin, wrap loosely and overlap each wrap by approximately one third the width of the roll.



Cover this intermediate bandage layer with overlapping wraps of elastic gauze or a stockinette. To prevent slippage secure the bandage in position

with elastic tape attached to the skin and hair at the cranial and caudal edges of the bandage.



During bandaging manipulate the ends of tube drains so that they can be easily accessed for aspiration or infusion. If it will be necessary to medicate the ear, cut holes in the bandaging over the external acoustic meatus.

3. Bandaging the Extremities

A soft-padded extremity bandage is used to cover

- a. abrasions,
- b. lacerations, or
- c. incisions and
- d. can be modified to accommodate splints for joint or bone immobilization. Modifications of the basic padded bandage may be necessary to allow immobilization, prevent slippage, or protect digits.



Immobilization is accomplished by placing a spoon splint, molded thermoplastic splint, fiberglass splint, or aluminum rods **between the intermediate and outer bandage layers**. These materials may sometimes **replace the outer layer**. It is important to ensure **adequate padding at the ends of the splint material to prevent skin irritation**.



- a. Begin by applying a 7 -inch porous tape stirrup to the dorsal and ventral or medial and lateral surfaces of the paw.

Extend stirrups **3 to 8 inches** beyond the digits to help prevent the bandage from slipping distally. If necessary, use a loose layer of elastic gauze to help secure the stirrups.



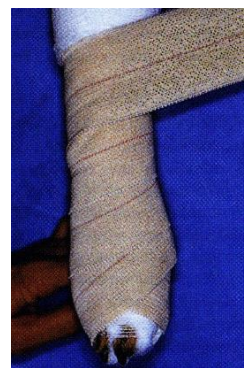
- b. Insert small pledgets of cotton or other absorbent material between the digits and the metatarsal-metacarpal pads and digital pads. Apply an appropriate contact layer over the wound. Snugly apply cast padding around the paw beginning at the level of the second and fifth digital pads. Wrap obliquely so that the third and fourth digits protrude slightly beyond the bandage.



Overlap the cast padding (2- to 3-inch width) one half to two thirds of its width as it is advanced up the leg. Continue the bandage to the proximal radius and ulna (tibia and fibula) or above the elbow (stifle), depending on the site of the injury. Use enough padding to create the bulkiness necessary for protection.

- c. *Snugly wrap elastic gauze (2- to 3-inch width) over the cast padding to conform the padding to the limb, overlapping each turn by one half the width of the material. Separate the tape stirrups and attach them to their respective sides of the bandage (Fig. 78-3, c).*

- d. *Apply an outer layer of elastic tape (2- to 3-inch width), overlapping one half the width with each turn.*



For a leg bandage

- A. apply a 1-inch porous tape stirrup to the dorsal and ventral or medial and lateral surfaces of the paw. Insert an absorbent material between the digits and the metacarpal or metatarsal and digital pads.
- B. Apply cast padding or cotton over an appropriate contact layer, overlapping wraps by one half to two thirds the width of the roll. Keep the third and fourth digits exposed. Conform the padding to the limb by applying elastic gauze. Apply a splint for greater immobilization between the padding and elastic gauze (optional).
- C. Fold the tape stirrups over the gauze.
- D. Apply an outer layer of 2- to 3-inch wide elastic tape, overlapping one half of the width of the tape with each turn.

Avoid overstretching the tape to avoid compromising limb circulation. Check exposed digits three and four frequently for swelling, coolness, and discomfort; remove the bandage and evaluate the limb if these signs are observed.

Slippage can be prevented by extending the bandage to encircle the shoulder and thorax (hip and caudal abdomen), creating a spica-type bandage.



This bandage immobilizes the shoulder or hip in addition to the more distal joints and often incorporates splint material.

The intermediate and outer bandage layers crisscross cranial and caudal to the affected limb and caudal and cranial to the contralateral limb, as described on p. 150 for abdominal and thoracic bandages. The bandage is reinforced with splint rod, fiberglass casting tape, or thermoplastic splint material if fractures are to be temporarily stabilized or if additional wound immobilization is desired.



Temporary immobilization of injuries below the elbow or stifle can also be accomplished by applying

1. a Robert Jones bandage or
2. a modified Robert Jones bandage.

A Robert Jones bandage is a large, bulky bandage that provides stabilization by applying compression to a thick cotton layer



A modified or light Robert Jones bandage has much less cotton padding, making it less bulky. Modified Robert Jones bandages are used to reduce limb edema after surgery. Onychectomy, digit amputation, or pad reconstruction may benefit from a bandage to protect the digits and reduce hemorrhage. In these cases stirrups should be applied laterally and the digits covered with gauze sponges or a nonadherent contact layer.



Reflect layers of 2-inch cast padding from dorsal to ventral and then ventral to dorsal over the end of the paw.



Extend the cast padding in a spiral pattern to the mid radius and ulna (tibia and fibula). Leave the proximal ends of the tape stirrup exposed to aid bandage removal. Cover



the cast padding with elastic gauze. Fold the tape stirrups to their respective sides.



Cover the bandage with tape From the distal extremity to the proximal hair , a thin, elastic stockinette, may be used to cover the contact layer and cast padding. It is applied with or without a "bale," or metal cage cylinder.

