BANDAGING PROBLEM AREAS ON DOGS AND CATS

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The veterinary practitioner is often called upon to apply bandages to wounds. Sometimes the area being bandaged requires special attention for the bandage to be effective and secure. The following are bandage techniques the author has found effective in bandaging certain areas on dogs and cats.

HEAD AND EAR

Head and ear bandages are needed for wounds and surgical sties in the area, e.g. auricular hematoma correction, total ear canal ablation, trauma wounds, tumor removal. The ear is often bandaged over the top of the head. To do so, adhesive tape strips are used to secure the ear over the head. A strip of 2" wide adhesive tape long enough to go around the dog’s head is applied length wise to one edge of the ear with half of its width adhered to one side of the ear. The strip is folded over lengthwise such that the other half of the strip adheres to the other side of the ear and to itself beyond the ear. This is done on both ear edges. Any necessary primary dressings are applied to wounds. A bolus of cotton is placed on top of the head at the ear base, and the ear with attached strips is folded over the top of the head, with one tape strip going in front and one in back of the opposite ear. With the strips wrapped around the head, the excess length is cut off.

The secondary bandage layer is wrapped around the head going in front and in back of the opposite ear alternately. With each wrap a marking pen is used to mark the location of the external ear canal opening, if medication is to be applied in the ear.

The tertiary layer is then applied. The author uses pretorn lengths of 2" wide adhesive tape, again marking the position of the external ear canal opening. The most important piece of tape on the bandage is the cranial-most one that has half of its width on the bandage and half of its width on the hair of the head. After applying this strip it is held in place with the bandager’s hand to warm the adhesive of the tape so it adheres to the hair and the bandage does not slip. On small dogs and cats bandages may fit better if this piece of tape comes out over the eyes and is cut back in this area to accommodate the eyes. If an elastic adhesive tape is used as the tertiary layer, care should be used not to get it so tight it obstructs respiration, especially if the bandage is applied with an endotracheal tube in place. With tube removal, a tight bandage can cause respiratory problems. When using elastic tapes that adhere to themselves, it is still necessary to use an adhesive tape strip to fix the front bandage edge.

If medication is to be applied to the ear canal, a scalpel blade can be used to incise tape over the marked ear canal opening and scissors can be used to remove remaining bandage material to expose the ear canal opening.

When changing the bandage, care should be used to 1) not cut the ear, and 2) not cut the tape strips securing the ear over the head.

ELBOW BANDAGES

When bandaging wounds over the elbow, immobilization and extension are important to prevent wound tissue movement and pressure on the area, respectively. Both of these impair healing.

With the animal standing, a primary bandage is applied over the olecranon wound/surgical area. Starting just above the paw a soft bulky secondary wrap is wrapped up the limb to cover the elbow area with 4-5 layers of thickness. The roll is taken over the top of the shoulders, wrapping 4-5 layers around the cranial thoracic area alternating wraps in front and in back of the forelimb. Wrapping is continued, especially in the elbow area, to produce a smooth transition/junction between the limb and body bandage. Cast padding covered by self adherent gauze may also be used for this layer.

The secondary layer is covered with pretorn short strips of 2-inch wide adhesive tape beginning distally and taping upward using a circumferential, dove-tail pattern. Long strips of tape are used over the thoracic bandage, and intermediate-length strips cover the juncture of the limb and body bandages. Alternatively, elastic tapes can be used as the tertiary layer. Using a razor blade and scissors, a hole is cut in the bandage over the olecranon to allow wound treatment without removing the entire bandage. A small bandage is replaced daily over the area after treatment.

For extension and immobilization on a large dog, fiber glass casting tape can be used to make a lateral splint that extends from the paw area to over the shoulders. This is taped in place. On a small dog a prepackaged fiber glass splint material can be used for this purpose. Alternatively, aluminum splint rod material can be used to fashion a loop to be incorporated in the lateral bandage for extension.

PAW PADS

Prevention of pressure on paw pad wounds is important in keeping the tissues from spreading apart which impairs healing or tears sutures through tissue. Three techniques can be used to off-load the pads. To reduce pressure over a metacarpal/metatarsal pad, a donut-type pad of intermediate compressible foam rubber can be incorporated in the palmar/plantar surface of the bandage. It has a hole cut in it to accommodate the wounded pad area.

Pressure reduction on digital pads can be accomplished with a triangular pad of the above mentioned foam rubber material placed under the metacarpal/metatarsal pad in the paw bandage. This elevates the digits.

For further pressure relief the cuff part of a Mason metasplint can be used under foam pads in both of the above bandages. These 2 types of bandage would be...
used on intermediate sized dogs with moderate wounds or surgery of the pads.

For maximum pad pressure relief a “clam shell” bandage/splint can be used. It is a localize crutch that off-loads all pads maximally. After placing a bandage on the paw, 2 Mason metasplints are applied to the bandage such that there is one on each side (caudal/cranial or medial/lateral) of the bandage with the paw cup portions facing each other and extending about an inch beyond the end of the bandage. They are taped in place with circumferential strips of tape. On the forelimb the splints extend to near the elbow, and on the pelvic limb they extend to the hock. These splint bandages are indicated for large dogs and in instances of major paw wounds or surgery.

PELVIC BANDAGES

Pelvic bandages are indicated for wounds or surgical procedures in this area, e.g. mastectomy, etc. A primary dressing is placed over the area. The secondary wrap encircles the caudal abdominal area and goes around the proximal portion of the pelvic limbs. On male dogs, the bandage is placed so that the scrotum is not included; however, the bandage fits better if it is placed over, rather than around the prepuce. After the bandage is applied a scalpel blade and scissors are used to carefully cut an aperture in the bandage to accommodate the cranial end of the prepuce, being sure there is no pressure where the cranial aspect of the prepuce joins abdominal skin.

As with elbow and head/ear bandages, a window can be cut in the bandage over the wound area to allow treatment without removing the entire bandage.

Tie-over bandages can be used in the pelvic region also. Loops of suture are placed around the wound. After placing a primary dressing and padding over the wound, umbilical tape is laced between the loops to hold them in place.

TAIL BANDAGES

The tips of long tails are often traumatized from tail wagging and hitting solid surfaces. To protect the tip of the tail as it heals a secure bandage that cannot be “wagged” off is necessary. After a small piece of primary bandage material is placed on the tail’s end, a small amount of secondary wrap is placed circumferentially around the tail. For securing the bandage, pretorn strips of 1-inch wide tape are applied circumferentially around the tail. At the proximal end of the bandage, a “shingling” technique is used to secure the bandage to hair on the tail. After a tape strip is applied, some hair is pulled from under the proximal edge of the tape and laid over the top of the tape. The next strip of tape “sandwiches” that hair between it and the underlying tape. The procedure is repeated 2-3 times to firmly affix the bandage to tail hair. Stirrups of 1-inch wide tape can be used similar to the way they are used on a paw to secure a tail bandage, but the author prefers the “shingling” technique. It should be remembered that tail bandages placed securely may also be difficult to remove. After the tail tip wound is fully healed, the use of a commercial paw pad toughening agent can be considered to help prevent the wound from recurring.

PREVENTING BANDAGE MOLESTATION

A major part of effective bandaging is preventing the animal from molesting the bandage. The author has used several techniques to prevent bandage/wound molestation.

Wire basket-type muzzles (e.g. greyhound, racing-type muzzles) can be used to keep a dog from molesting a bandage on any area of the body. They are commercially available from pet supply providers and come in sizes for very large to very small dogs. Dogs may initially try to paw them off over their nose. A piece of tape from the strap behind the head to the muzzle over the caudal nasal area can help prevent this. Although dogs can drink with the muzzle in place, it must be removed for eating.

Side braces can be used to help keep a dog away from its hind quarters. These can be fashioned from aluminum splint rods such that they fit around the neck and extend along the sides of the dog. Other firm material can be incorporated bilaterally in a body bandage to prevent a dog from reaching its hind quarters.

Elizabethan collars which can be affixed to a dog’s collar or plastic buckets or bowls (for small dogs or cat) with the bottom cut out can be used to keep a dog’s head/mouth away from anything caudal to the device or the animal’s paws away from anything cranial to the device, i.e. head. With all of these restraint devices, it should be remembered that the animal cannot take care of its own natural hygienic habits. Thus, the care giver will have to take care of this.

References