

The Universal Dermatology Bandage Kit: A Succinct Collection of Supplies

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Biopsies, excisions, and other invasive cutaneous procedures are daily occurrences in dermatology clinics. Each procedure requires subsequent placement of a bandage; physicians can be left with an overwhelming choice of supplies for this purpose. We present a universal bandage kit as a resource for physicians in search of a concise guide for purchasing materials and educating nursing staff. These few supplies meet all bandaging needs that arise in a dermatology clinic.

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Practice Gap

Biopsies, excisions, and other invasive cutaneous procedures are performed regularly in dermatology clinics and require placement of a bandage after the procedure. Postprocedural bandaging varies by the type of procedure performed, anatomic site, and the physician's preference of materials. Dermatologists can be left with an overwhelming choice of supplies and little practical education, as bandaging methods are not routinely addressed in residency curricula. To address this concern, we provide a succinct list of basic materials that are versatile and easily adapted to encompass all bandaging needs for dermatology procedures (Table).

With these few components, one can create an array of distinct bandages to cover wounds as small as a shave biopsy to linear closures and basic flaps or grafts. Even traditionally difficult-to-bandage areas are easily addressed. Simple modifications of the basic materials are required for each bandage adaptation, as outlined below.

The Techniques

Shave and Punch Biopsy Sites—Layer (from bottom to top) the emollient of choice, a cut 4×4-inch gauze pad, and flexible polyester tape cut to the appropriate size (Figure 1). This simple bandage conforms well to any anatomic site and can replace an adhesive bandage, if desired.

Cutaneous Surgery Sites—Pressure bandages are recommended on cutaneous surgery sites. One of the most common closures performed in dermatology is the layered closure with dissolvable subcutaneous sutures and nondissolvable cutaneous sutures. When this closure is performed on the trunk and proximal extremities, undermining often is required to adequately approximate skin. This technique eliminates tension on the wound but can increase the risk for hematoma.¹ A pressure bandage left in place and kept dry for 48 hours after surgery helps eliminate the risk for postoperative bleeding.

To make a pressure bandage, layer (from bottom to top) the emollient of choice, a nonstick pad cut to size, folded 4×4-inch gauze pads, and flexible polyester tape (Figure 2). Our practice routinely utilizes the tape fanning technique² to impart equal and firm pressure over the wound.

Complex Sites—When making a pressure bandage for an anatomically complex site—the ear, nose, or lip—nonstick pads and 4×4-inch gauze pads can be cut and folded or rolled to match the size and shape of the wound. Flexible polyester tape then conforms to these

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custom bandage shapes, allowing maintenance of targeted wound pressure (Figure 3).

Dental rolls can be of assistance on these sites. For example, a dental roll placed in the postauricular sulcus prior to bandaging an ear maintains comfortable anatomic positioning. Rolls can be placed in the nose, maintaining its architecture while the wound heals and providing

counterpressure for added hemostasis of wounds on the lateral nasal sidewall and ala. We recommend coating dental rolls in petrolatum prior to placement in the nares for ease of removal and patient comfort.

Distal Arms and Legs—Another layer of compression is added to pressure bandages on the distal upper and lower extremities using a fabric and elastic wrap (Figure 4).

Components of the Bandage Kit

Component	Description
Cotton dental rolls	Dental rolls can be used on wounds that require targeted, firm, linear pressure or to maintain the appropriate anatomic position of a free margin when bandaged; can be folded or cut to size
Elastic wraps	Long-stretch elastic bandages are preferable to short-stretch elastic bandages for patient comfort and maintenance of circulation while imparting appropriate pressure to wounds on extremities
Emollient	Plain petrolatum is preferable given its anergic properties; however, other emollients can be used, including lanolin and antibiotics based on surgical site, patient need, and physician preference
Gauze	100% cotton, nonwoven, 4×4-inch gauze pads are preferable to woven gauze pads because of their superior absorbency; nonwoven pads can be cut to size and folded
Moist gauze	Our preference is petrolatum and bismuth tribromophenate gauze for its nonstick ability and antimicrobial benefit
Nonadherent dressing	Nonstick pads cut to size, as needed, are used to prevent a bandage from adhering to the wound bed and to absorb physiologic serosanguineous drainage
Tape	Flexible polyester tape with acrylic adhesive is our tape of choice because it can be cut to size, conforms to any wound, strongly adheres to skin without excessive irritation, and can be stretched (with proper technique) to impart variable pressure on surgical wounds
Utility bandage scissors	Bandage scissors can cut dense bandage materials, unlike traditional scissors that buckle when encountering thicker products, such as dental rolls and stacked 4×4-inch gauze pads



FIGURE 1. Bandage on a biopsy site.



FIGURE 2. Pressure bandage on the trunk following excision and intermediate linear repair.



FIGURE 3. Pressure bandage on the ear, a traditionally hard-to-bandage site. The elasticity of the tape conforms to the helical rim.



FIGURE 5. Petrolatum and bismuth tribromophenate gauze folded to size and placed over a wound that will heal by secondary intention.



FIGURE 4. Pressure bandage on the anterior shin followed by application of elastic wrap. There is precise overlap with each pass around the leg.

The extra layer keeps the bandage in place on the upper extremities while the patient continues their daily activities. It also helps prevent edema and pain in the lower extremities.

The degree of postoperative lower extremity swelling varies by patient and procedure performed but largely is inevitable with surgery on the leg, given the potential for superficial lymphatic disruption and the dependent position of the leg when standing. Elevation is always

advised, but a well-wrapped, long-stretch elastic bandage provides extra support, especially if the patient has baseline venous insufficiency or needs to be on their feet during the day. The wrap is applied from the distal to the proximal leg with graded compression, overlapping by half with each rotation. The wrap is tightest near the ankle, with gradual and subtle easing of tension as it is placed superiorly.

Healing by Secondary Intention, Full-Thickness and Split-Thickness Skin Grafts, and Partial Wound Closure—These postoperative scenarios require bandages with appropriate pressure; however, dressings need to remain moist against the patient's skin for comfortable removal, which can be accomplished with petrolatum-impregnated gauze with or without antibacterial properties. The gauze is folded to the appropriate size and placed directly on the wound or sutured in place (Figure 5). A pressure bandage is then applied on top of the gauze.

Practice Implications

The universal bandage kit and instructions for its adaptation to accommodate multiple clinical needs can serve as a helpful resource for dermatologists and their staff.

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