

## Wound Care in Rabbits

*By Gail N.*

Although veterinarians are our best friends when our rabbits are sick, often the instructions we are given on home care lack the background and practical details we need to provide good wound care for our rabbits. This article will cover wound care basics such as fundamental theory, challenges of wound care in rabbits, available materials and practical tips. Wounds in rabbits may be from diagnoses like abscesses (probably the most common), moist dermatitis, or ulcerations. In no way does this article or any information referred to within it replace veterinary care or advice by a knowledgeable rabbit veterinarian.

A primary consideration when caring for wounds in rabbits is their thin, delicate skin protected by their thick fur. The combination of fur, fragile skin and the relatively slow healing rate of rabbits, makes choosing materials for bandaging particularly challenging. The purpose of bandaging wounds is to keep wounds moist but not wet. Successful bandaging decreases infection, healing time and scarring (Mickelson, et al, 2016). We found that several techniques and various materials were necessary to manage long-term abscesses in Henry and Lapin. If you missed a previous newsletter article, Henry had an open ear abscess and Lapin had an open abscess at the base of a lower incisor. If you see your bunny making little progress towards healing, ask your vet if another method would be more effective.

Common procedures you may be performing on your furry, (squirmy!) friend include flushing and/or cleaning a wound, applying topical medications, applying, and changing dressings. Here we discuss each in turn.

### Supplies and pre-care planning

Wounds require extra calories to heal (Mickelson et al., 2016) so ask your vet to recommend a supplement. A common supplement is Critical Care, which comes in original (anise) and apple/banana flavor. All but the sickest of our bunnies have eaten the apple/banana flavor with enthusiasm. Adding a little extra banana can encourage them to eat until their appetite returns. Keep the environment quiet, comfortably warm and meticulously clean. Wash litter boxes, bowls, bottles and bedding in hot, soapy water. For wound patients, after washing items with soap and water, we rinse them in white vinegar, a mild disinfectant. If your rabbit is bonded, ask your vet if they can remain together. This may depend on whether the bond mate will be gentle with the wounded bunny or if there is a danger that the untreated rabbit will ingest a topical medicine from an open wound. If they must be separated, it causes less stress to keep them within sight, smell and touch of each other, if possible. We found this method effective for Henry. The initial treatment of his open abscess involved several medicines that would have been toxic to his bond mate, Adele. Keeping him in a pen outside her condo allowed the two to touch noses and take comfort in each other's presence. FoR has had success in rebonding rabbits separated by health issues.

When it is time to treat the wound have clean towels, gauze pads, and other needed supplies nearby. It is amazing how often you have the rabbit perfectly positioned- and the betadine flushing solution is across the room! Wash your hands before handling your rabbit and after cleaning the wound. Gloves are a good alternative because they can be changed without disturbing your rabbit. Consider using a storage box as shown in Fig. 1.

Label the kit with the rabbit's name and tape a treatment sheet to the top. Put the rabbit's medications, gauze pads, sterile Q-tips, surgical scissors, and any other needed supplies inside. The container can easily be carried



Freya in her Medical Pet Shirt during recovery from abdominal surgery <http://livestockconcepts.com/en/wound-care/9788-medical-pet-shirt-protective-shirt-rabbit-medium.html>

All Photos: Gail N.

to a treatment area. Include a container of treats to make wound cleaning and dressing a more positive experience for you and your bunny.

Although your vet will initially shave/trim the fur around the wound you may need to do some additional trimming. Try using surgical steel, curved and/or blunt nose scissors. Using mineral oil on the scissor blades will keep fur from contaminating the wound. Soak scissors, tweezers and other tools in Nolvasan Solution Animal Premise Chlorhexidine Diacetate disinfectant (from [www.valleyvet.com](http://www.valleyvet.com) ,or [www.lambertvetsupply.com](http://www.lambertvetsupply.com) ) when not in use. FoR can assist with shaving or trimming your rabbit's fur.



Fig 1. Rabbit Wound and Medication Kit

### Flushing/cleaning wounds

The first step in caring for open wounds, particularly abscesses, is often cleaning or flushing (lavage) the wound. This step cleans off dead cells and other debris important to allow healing. It is important to wear gloves, wash hands thoroughly and keep your work area as clean as possible to avoid the possibility of introducing bacterial residing on your skin or work surfaces into the wound.

Follow your vet's instructions carefully. Wounds can be worsened if a solution is pushed too aggressively into the wound. One percent povidone iodine (Betadine) solution is often used to lavage a wound at home (Wildlife Information Network, The Royal Veterinary College, 2004). Chlorhexidine sponges are commonly used to clean a wound. NOTE: The Chlorhexidine used for wound cleaning ( Chlorhexidine *Gluconate* ) is NOT the same chemical you use to soak scissors or other tools ( Chlorhexidine *Diacetate* ) between uses.

Ask your vet what healthy tissue looks like. This will tell you if you are being diligent enough (or too diligent) about cleaning a wound. Remember- too much cleaning could remove helpful immune cells, new tissue, delay healing and cause your rabbit additional discomfort.

### Topical medication

In some cases, you may apply a topical medicine. Wounds that are infected, caused by myiasis (fly strike), and burns are examples of wounds that usually require topical medicines (Graham, 2004). Neosporin, a commonly used broad-spectrum ointment, for humans is not generally recommended for rabbits. The same is true of SSD 1% Silver Sulfadiazine Cream and Nitrofurazone (Wildlife Information Network, The Royal Veterinary College, 2004) (Graham, 2004). Only use topical medications prescribed by your vet that are explicitly stated to be safe for use on rabbits. Manuka honey, complying with precise standards, has been researched (references on request) for its antibacterial and healing properties. Medihoney, a form of Manuka honey, is used for large surface wounds, like burns or myiasis.

### Bandages

Bandages consist of three layers. The primary or contact layer is sterile and provides a moist environment to promote wound healing. The secondary layer absorbs the liquid (exudate) from the wound and the third or tertiary layer holds the primary and secondary layers in place. The tertiary layer's additional function is to immobilize the wound to promote healing (Mickelson, Mans, & Colophy, 2016; Graham, 2004). Many materials available to you combine the layers in one bandage. Improper bandaging can impair wound healing and damage healthy tissue. Always contact your vet if you are unsure of your technique. There are numerous topical treatments, tapes, bandages, dressings and covers (to discourage chewing). There are several resources provided in the references section for more information. Fig. 2, 3 and 4 show examples of materials you may be given to use. To keep your rabbit from chewing bandages, try covering them with baby socks, baby t-shirts, Medical Pet Shirt for Rabbits or 3M Vetrap. Tubular gauze bandages (Fig. 3) are another option.

Elizabethan collars are rarely successful on rabbits, as we found with Henry. Effective pain relief and temporarily taping his paw so he could not scratch the wound proved more effective.

Figure 2 (right). Clockwise from left: Medihoney, Skin Prep ( better adhesion over fur), Mupirocin ointment, Manuka Honey (UMF +20), Tapered, curved tip, 12cc syringe (for flushing), Tongue depressors (gentle, topical medication applicator), alcohol wipes (for use on flushing syringe tip, etc) and Chlorhexidine Gluconate wipes



Figure 3. (Left). Clockwise from upper left: Smith&Nephew one handed membrane bandage, Tegaderm non-stick pad film dressing, Nexcare waterproof bandages and flexible fabric Band-aid



Figure 4 (right). Clockwise from top left: Non-adhesive dressing, wound closure strips (can be cut to size, close small wounds), moleskin (used as padding and adhesive), tubular gauze bandage, Stomahesive (long-term adhesive), 1/8" umbilical tape (wound packing), 3M foam, cloth and porous tapes.



You may be asked to care for a wound two or more times a day. If you work, find someone to help you with this or check with your vet about how you may space the treatments. For example, you may be able to do a treatment before work, after work and at bedtime. Check your bunny during every treatment looking for signs of skin breakdown from lack of exercise, diarrhea or other unusual symptoms. The home care you provide is often the deciding factor in the chances for survival and quality of life for you your bunny. Always, always, ask your vet if you are unsure of any procedure or material!

## References

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