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Skin Problem? Aloe-Med Is Top Gun

The right medicated shampoo depends on what you're fighting. For a preventative, a mild shampoo is perfect. For a serious problem, you need to reach for killer ingredients.

There are "medicated" shampoos and there are medicated shampoos. The equine market is flooded with gentle, mildly medicated shampoos for preventive use. If a mildly medicated shampoo has built-in conditioners, we find using it once in the spring and once in the fall to correspond with seasonal shedding is beneficial. We don't recommend the routine use of even mildly medicated shampoos, and we feel it's best to keep bathing of any kind to a minimum.

Certainly, we save the "heavy guns," those medicated shampoos that have been formulated to deal with serious skin problems, for use

under veterinary supervision. In many instances, the use of heavy medicated shampoos is not only unnecessary but counterproductive. "If it ain't broke, don't fix it" definitely applies.

The unwarranted use of antibacterial agents might upset the natural bacterial balance on the horse's skin and set the stage for problems when there weren't any to begin with.



Regardless of your shampoo choice, it's important to thoroughly scrub and get at every patch of skin when giving a medicated shampoo to your horse.

Topical Care For Crusty Skin Infections

In our January 1997 issue, we suggested several treatments for difficult-to-treat crusty skin infections and for scratches. Since then, we have found another remedy we feel may be the best yet in terms of both effectiveness and cost:

Mix 8 oz. unscented/hypoallergenic vitamin E cream (about \$3.99/generic) with 8 oz. of cocoa-butter cream (about \$3.99/generic). Cocoa-butter cream tends to be hard and waxy. Soften it first in the microwave for a consistency that can be stirred and made free of lumps. Add 10 cc of vinegar (the acetic acid will raise skin pH), 15 cc of 20% sodium iodide solution (an antibacterial/antifungal that is effective against intermediate organisms such as Streptothricosis), 3 cc of broad spectrum antibiotic solution, such as gentamicin or a cephalosporin, and 10 grams of glucosamine powder (yes, the joint nutraceutical; it's beneficial for all connective tissues, including skin). Your local farm supply may have the sodium iodide or ask your vet.

Apply generously to involved areas. Use a sweat bandage (plastic wrap around the leg itself or around your cotton bandage) to drive the medication in. For difficult-to-bandage heel areas, use a sanitary napkin held in place with Vetrap or an Ace bandage. Most crusts fall off the first day, and legs look great in two to three days.



In addition to a medicated bath, severe infections like scratches will need a topical treatment.

We know two things for certain when it comes to equine skin disorders: First, it is difficult to positively diagnose many skin problems. Second, few studies are available concerning the effectiveness of various substances on skin problems.

Skin problems that make us reach for medicated shampoos include:

- Eczema (chronic skin inflammation)
- Psoriasis (scaly skin lesions)
- Heavy dandruff
- Seborrhea (abnormal sebum production)
- Ringworm (fungus)
- Scratches (dermatitis at back of pastern)
- Cannon keratosis (an overgrowth of horny tissue)
- Rain scald or rot (dermatitis on back, loins, and croup caused by dermatophilus bacteria).

For any skin problem, a veterinarian should be involved in the diagnosis and selection of a product. We looked at 21 products in terms of active ingredients, concentration and

What Ingredients Do You Need?

- Aloe Vera**—Plant extract. An emollient and wound healer. Anti-inflammatory and skin-moisturizing effects. Used to treat burns and superficial skin inflammations.
- Benzoyl Peroxide**—Keratolytic. Ingredient in anti-acne drugs (Clearasil and Oxy preparations). Stops a bacterium from breaking down sebum (a type of fat) in the skin to fatty acids, which irritate the skin. Helps dry the skin, which can be a benefit or unwanted side effect. Local irritation is a common side effect.
- Chlorhexidine**—Antiseptic and disinfectant. Cleansing agent said to be effective against many bacteria, viruses, yeast and fungi. Should have a longer-lasting antibacterial effect than povidone iodine as it binds to the proteins in skin yet it is poorly absorbed through the skin.
- Chloroxyleneol**—Topical antiseptic and antibacterial agent. Long shelf life. Often found in the form PCMX (parachlorometaxylenol).
- Coal Tar**—Anti-eczematic. Used for treating scalp ailments in humans (Denorex). Helps prevent growth of scaly cells. Controls and helps relieve itching and inflamed skin and treats eczema, psoriasis, dandruff, seborrhea and ringworm.
- Povidone Iodine (PI)**—Contains polyvinylpyrrolidone, a dispersing and suspending agent that creates an iodine solution that is more stable, longer lasting, less irritating and non-staining. Classified as topical anti-infective. PI kills bacteria, bacterial spores, funguses, viruses and amoebic cysts. The antibacterial effect is short-lived (4-6 hours), so daily baths may be required.
- Phenol**—General disinfectant, antiseptic and topical anesthetic used in treating itchy skin conditions.
- Salicylic Acid**—Antiseptic, antifungal and keratolytic. Skin-drying agent in human wart, acne, and scalp preparations and ringworm preparations for horses. Decreases stability of the outer layers of the skin, which makes the top layers flake easily for removal. Local areas of rashes or dry skin may occur.
- Tea Tree Oil**—Melaleuca, from Australian tea tree. Believed to be antiseptic, antifungal; low skin sensitivity.
- Triclosan**—Antiseptic, disinfectant. Cleanses skin and decreases bacteria. In humans it is used to treat minor skin infections and as a hand disinfectant. (Found in Clearasil, Neutrogena Acne Skin Cleanser, pHisoHex, etc.) Unlikely to have sensitivity problems.

Which Shampoo Action Do You Need?

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| Anesthetic: Producing loss of sensation. | Antiseptic: Destroys bacteria. |
| Anti-infective: Prevents infection. | Emollient: Soothes skin/mucous membrane. |
| Antibacterial: Prevents bacterial growth. | Keratolytic: Separates and loosens the outer skin layer. |
| Anti-eczematic: Used to treat eczema. | Vulnerary: Promotes healing. |
| Antifungal: Antagonistic to fungi. | |

price. In our chart, we include our suggestions for use of the product and our assessment of its strength.

TREATING SKIN INFECTIONS

Whether it is a body-wide case of "rain rot" or a problem with heel "scratches," success in treating skin problems may require more than one method. The best medicated shampoo will not help if it does not get to the organism. If the hair is thick, clip the horse. Hair provides a perfect growth environment: controlled temperature and favorable moisture levels. Air and sun also help clear infections.

Scabs should be gently removed. Spots of particularly severe involvement may require use



We find Aloe-Med our first choice for serious problems.

of stronger creams and/or injectable antibiotic therapy as well as topical shampoos.

Ringworm often will not respond to anything but specific antifungal medications. The medicated shampoo can cleanse the area, but follow this with an antifungal cream.

TIPS FOR MEDICATED BATHS

- Wear rubber gloves during the bath, especially if you have sensitive skin.

- If possible, use warm water, as this helps medicated shampoos work effectively.

- Follow the directions. If 2 oz. is recommended, don't figure 4 oz. will clear up the problem twice as fast or "leaving a little on" will help to keep it working.

- Work the medicated shampoo in with a curry with thick rubber fingers.

- Depending on directions, let the horse stand well lathered with the shampoo "working" for five to 30 minutes cross-tied, in the sun or under a washable cooler if it's under 60° F or otherwise chilly. Launder cooler before reusing.

- Rinse thoroughly and remove excess water with a soft squeegee, not a traditional sweat scraper.

RECURRENT PROBLEMS

Horses that are prone to develop skin problems may have an underlying nutritional inadequacy and/or impaired immune system. Suspect a nutritional problem if the horse is also prone to hives and/or has hoof quality problems. Topical treatment may give temporary control, but a cure will only be possible when the underlying problem is corrected.

Many of the same nutrients needed for skin health also affect the strength of the immune system and hoof quality. Trace mineral deficiencies of copper and zinc often cause such problems. Feed about 170 mg of copper and 510 mg of zinc per day, the required intake for an 1,100-pound horse.

Choose a supplement that contains the full range of B vitamins, in amounts required on a daily basis. Vitamin A is also important, especially if the horse is on grass hay only and has no access to fresh grass. Total dietary protein should be at least 10% (add methionine and lysine, if levels are not adequate). MSM, as a bioavailable source of sulfur in addition to the methionine, may also help.

BOTTOM LINE

For serious bacterial skin infections, we go right for the "big guns." Aloe-Med is our first choice here. We find Hibiclens or Nolvasan Cleanser good choices for horses with sensitive skin or iodine sensitivities.

For daily treatment of generalized but not too severe conditions, Mela-Septic is an excellent choice and our recommendation.

None of these products is likely to be effective in a fungal infection. You'll need a prescription medicated shampoo or spot treatment using a +++ or ++ iodine shampoo and an antifungal cream, such as for athlete's foot. For severe itching, scaling or dry skin, we would use SaliTar. **HJ**

Medicated Shampoos

Our scale for assessing strength: ++medium strength—effective in treating/controlling/inhibiting but not necessarily curing the problem
 - no medicinal effects
 +mild effects—symptomatic relief
 +++ for serious skin problems—has the capacity to kill infections, cure the problem.

Product/ Manufacturer	Primary Ingredients	Strength And Indications	Comments	Price
IODINE SHAMPOOS				
Betadine Surgical Scrub/ Purdue Frederick	Povidone iodine (.75% available iodine).	+++ Treatment of bacterial or fungal infections, cleansing wounds.	Antiseptic, antimicrobial sudsing skin cleanser used as surgical prep. Not suitable for large areas or long-term use, unless directed by veterinarian. OK for spot use with advice of vet.	\$6.25/qt.
Aloe-Iodine Shampoo/ Farnam Horse Health	Aloe vera extract, .5% available iodine (prilled iodine).	++. Adjunct to treatment of bacterial or fungal infections. Primary therapy as directed by veterinarian.	No label guarantee after expiration date due to loss of potency of iodine, although still OK as shampoo. Do not use in conjunction with other meds or insecticides, unless directed by vet, as it may interfere with iodine effect.	\$8.57/qt. \$19.94/gal.
VIP-20 Shampoo/ Farnam Equicare	.5% available iodine (prilled iodine).	++. Same as Aloe-Iodine, above.	Same as Aloe-Iodine, above.	\$8.66/qt. \$18.52/gal.
Viodine Medicated Shampoo/ Farnam Equicare	5% povidone iodine (.5% active iodine).	++. Not recommended as a primary therapeutic shampoo (iodine level too low). May be recommended for infection on top of other problem. May help with dermatophilus or heel "scratches."	Maintenance skin shampoo.	\$9.28/pt. \$30.09/gal.
Ultra Iodine Conditioning Shampoo/ Schneiders	.5% active, titratable iodine complex.	++. Same as for Viodine, above.	Designed for regular (weekly) use. Superior conditioning effect.	\$11.50/qt. \$31.50 gal.
Iodine Shampoo With Aloe Vera/ United Vet Equine	5% aloe, 1% crude iodine, potassium iodide (.5% available iodine), PCMX (parachlorometaxlenol); percentages are approximate.	++. Same as for Viodine, above.	Surfactant shampoo base.	\$7.95/liter \$19.95/gal.
Su-Per Iodine Shampoo/ Gateway	2% povidone iodine (.24% active iodine).	+. Same as for Viodine, above.	Mild shampoo base. Can be applied directly or diluted.	\$6.77/qt. \$18.50 gal.
Aloe Iodine/ Berlin Industries	Nonyl-iodine complex, aloe vera gel, allantoin.	+. Same as for Viodine, above.	Anionic shampoo base. Rinses easily.	\$6.50/qt. \$14.95/gal.
CHLORHEXIDINE PRODUCTS				
Hibiclens/ Zeneca Pharmaceuticals	4% chlorhexidine gluconate (Hibitane).	+++ Same as for Betadine but not as effective against gram-negative bacteria, so infected wounds should be cultured first.	Good choice for iodine-sensitive horses. Antiseptic, antimicrobial skin cleanser. Suitable for superficial wound cleansing, surgical scrub. We would avoid long-term use or use over large body areas. Has expiration date.	\$8.49/8 oz.
Nolvasan Skin And Wound Cleanser/ Fort Dodge	2% chlorhexidine acetate.	+++ Same as for Betadine.	General skin cleanser in a stable detergent base, but not as suited for a medicated bath.	\$7.35/8 oz.
Nolvasan Shampoo-Condition/ Fort Dodge	.5% chlorhexidine acetate.	+. Not for treatment of true skin diseases.	Conditioning shampoo base. Will deodorize and cleanse.	\$5.69/8 oz.



Product/Manufacturer	Primary Ingredients	Strength And Indications	Comments	Price
OTHER INGREDIENTS				
Medicated Shampoo/State Line	1% PCMX (parachlorometaxylenol), coconut oil, aloe vera.	+. Poor activity against gram-negative bacteria and fungi.	Similar to Denorex, a human shampoo, but without the benefit of coal tar for scaling). Mild medicated shampoo for use during seasonal shedding.	\$5.70/pt. \$8.70/qt. \$18.20/gal.
Gold Nugget Antibacterial Shampoo/Gold Nugget	.15% PCMX (parachlorometaxylenol), <.1% phenoxyethanol.	+ to -. None to recommend it over regular shampoo.	Mild shampoo for seasonal shedding.	\$1.95/4 oz. \$6.95/pt. \$9.95/qt. \$25.95/gal.
<u>Aloe-Med Shampoo/Aloe Advantage</u>	.4% phenol, aloe vera.	+++ . Use for bacterial or fungal infections. Has a wide spectrum of activity. Potency and its ability to penetrate scabs make this a choice for refractory scratches.	Not for long-term use. Could cause skin irritation, but aloe should help counter that. Good value.	\$7.99/pt.
Mela-Septic Medicated Shampoo/Equine International	.75% melaleuca alternifolia oil (Australian tea tree oil), hydrolyzed keratin protein, panthenol, vitamin E, wheat germ oil, rosemary, coconut oil.	++. This level tea tree oil is bactericidal against some bacterial. Not as primary/sole treatment for fungal infections, like ringworm.	Excellent choice with noninfectious or low-grade skin conditions and/or conditions where secondary skin infection is a possibility. Also available in a topical spray. Good conditioning effect.	\$10.50/qt.
Pure Pacific Shampoo/AJ Products Inc.	Small amount eucalyptus oil.	-. Best used for scaling problems, like scurf.	Contains no preservatives, coloring or chemicals. No active medication.	\$2.95/8 oz. \$5.95/pt. \$9.75/qt.
SaliTar Therapeutic Cleansing Shampoo/VetGenix	10% coal tar solution USP, 2% salicylic acid USP.	++. For dry, itchy skin conditions.	Excellent at removing scales and controlling itch. Leaves coat soft. Expiration date.	Through veterinarians only; prices vary.
Cyt Oxyl Anti-microbial Shampoo/VetGenix	5% benzoyl peroxide.	++. May be effective as sole agent in bacterial/rain rot if condition is not too extensive.	Contact sensitivity with benzoyl peroxide not reported in horses, but 1-2% in humans. Expiration date.	Through veterinarians only; prices vary.
Alpha Dx/VetGenix	10% glycolic acid.	++. Good for drying and scaling.	Expiration date. Moisturizing shampoo.	Through veterinarians only; prices vary.
Derma Clean/Healthy Hair Care	Triclosan, vitamin E, aloe vera.	+. Good for general moisturizing.	Can be used with other medications. Apply higher amount to trouble areas. Not too much foam, deodorizes coat.	\$8.95/pt. \$14.95/qt. \$29.95/gal.

Don't Mess Around With Skin Problems. Know What You're Using And Why:

For routine cleaning of mild skin infections or abrasions, medicated soaps offer no strong advantage over regular soaps. Moisturizing products will help horses whose skin dries out easily with bathing. Otherwise save the medicated shampoos for skin problems that don't clear up within a few baths with standard shampoos. Rinse with 1/3 cup vinegar to five gallons of water to restore normal skin pH.

When dealing with body-wide, serious or fungal infections, particularly circular areas with a rim of inflamed skin and an inner zone of quieter-looking skin (ringworm is contagious to people), get advice from your veterinarian and check our ingredients list on page 6 to help zero in on the right ingredients.