



THE PRODUCT, CARE AND SERVICE GUIDE FOR PEOPLE WHO LOVE HORSES

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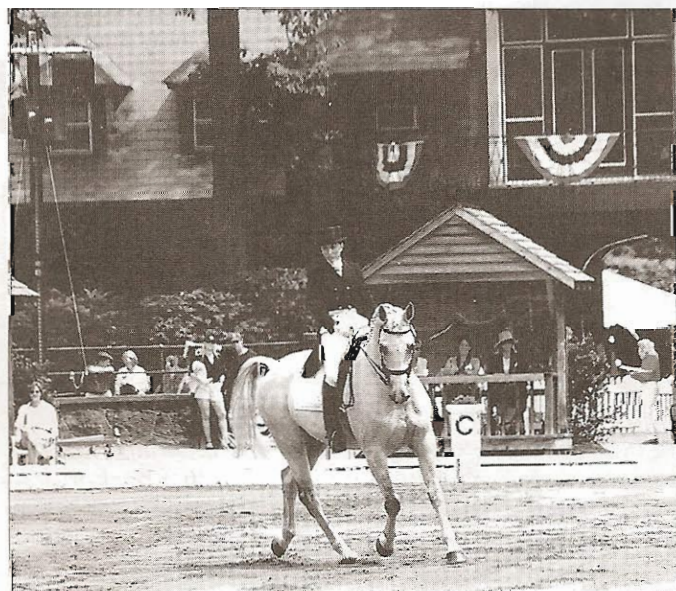
Stop your feet from slipping forward.



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Herbal Sore No-More Reigns In Liniments

Absorbine, Bigeloil and Choate's are the leaders in traditional-ingredient products.

Like us, horses respond favorably to a little pampering, and nothing dulls their enthusiasm for exercise like stiffness. Enter liniments. A little time and effort spent in relaxing and relieving muscle soreness and leg fatigue after a hard work pays off big time.

Muscle and joint/tendon/ligament pain builds in the 24 to 72 hours after hard work, creating a variety of secondary compensations involving uneven loading of the legs and muscle tension, as the horse tries to avoid loading the initially tender areas.

Easing post-workout soreness helps combat these problems. Done right, think of it as the equine equivalent of a long soak in a hot tub. There's a reason top-notch equine athletes have grooms whose primary job is to "rub" the horse—both muscles and legs. Liniments make this physical therapy both easier and more effective.

But it's not just hard-toned athletes



Hard-working horses deserve special care.

who can benefit from liniments. Even weekend warriors need the relief provided by liniments, in some respects even more so. Horses get stiff and sore from overdoing it just like we do. Adding a liniment to your after-work rinse water makes it easier to cut through sweat and grime, has an antiseptic effect on skin irritations and has a cooling, invigorating effect on the horse. When the horse has dried, rub in full-strength liniment over the back, rump, chest muscles and lower legs for a stronger soothing effect.

Consider This . . .

- Vigorous massage increases irritant effects.
- Horses with sensitive skin should undergo a 24-hour spot test before using a new product. The skin on the back of the pastern is a good spot to use.
- If you wrap, either use a liniment you've used on the horse before or apply the new product on open legs for three days to check for sensitivity, even if you did a 24-hour spot test.
- Inflamed areas are always more sensitive and will blister or scurf more readily.

SIGNS OF SORE MUSCLES

A sore muscle will influence how the horse moves. Damaged muscle feels hard and is tender to touch, but there may or may not be an obvious lameness. The ache may be present in limited areas, such as the back, pectorals in the chest, the hamstrings, the inner thigh muscles, quadriceps above the stifles, triceps of the upper front leg and also the neck.

TREATMENT

Injuries should be examined by your veterinarian. Otherwise, topical treatment, heat, massage, gentle stretching and turnout are the keys to handling muscle problems. The best rule of thumb for massage and stretching is simple: If it appears to hurt, don't do it. Gentle massage and manipulation will help the muscle relax, but if you do it incorrectly, the pain will worsen. If you're not sure, stick to light rubbing, warmth and a good liniment.

Remember that liniments with counterirritant ingredients stimulate blood flow to the area, which can worsen acute inflammatory swelling. If you suspect the horse has an acute injury to the muscle, icing should be used for the first 24 hours and it can be combined with a mild liniment (the liniment can be cooled before applying). The problem with cold therapy—and you must be careful about this with acute injury—is that it can trigger spasms.



Sore No-More is again a top pick.

HOW TO USE LINIMENTS

- Diluted in a water bucket and applied liberally with a sponge as a rinse. This body wash/brace after

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Liniments

✓ Horse Journal Editor's Choice

\$ Horse Journal Best Buy

Product	Ingredients	Comments
<p>✓ Absorbine Veterinary Liniment W. F. Young, Inc. 800-628-9653 www.absorbine.com \$12.95/12 oz. gel \$12/16 oz. liquid</p>	<p>Menthol 1.27%, chloroxylenol 0.5%, iodine 0.02%, plant extracts of calendula, echinacea, wormwood, acetone. Staining: No Irritation potential: Low Wrapping safety: Caution Need for gloves: No</p>	<p>This time-honored favorite is a highly effective muscle rub, and our testers raved about the ease of use, rapid absorption, no waste and the obvious effectiveness of the gel formulation. The liquid, too, is an excellent muscle rub and soothes stiff, sore legs and joints. Fairly strong counterirritant effect. Avoid use over lower leg areas with acute inflammation or if intending to wrap. Disinfects skin, soothes insect bites, itch and superficial irritations. Excellent choice for body wash.</p>
<p>Arnica Rub Berlin Industries 800-544-3635 www.farriersmagic.com \$16/16 oz.</p>	<p>Arnica, green tea, tea tree oil, eucalyptus, peppermint in a water-soluble base. Staining: No Irritation potential: Low Wrapping safety: Caution Need for gloves: No</p>	<p>Thick, creamy, yellow with a pleasant mild odor. Its consistency minimizes waste, keeps product where you want it. Mixes easily in water as a post work-out brace. Obvious visible pain relief when used over acutely inflamed joints. No effect on swelling. Worked well for massage of stiff, sore muscles. Well absorbed and doesn't leave a residue on the skin.</p>
<p>✓ Bigeloil W. F. Young, Inc. 800-628-9653 www.wfyoung.com \$11/16 oz. liquid or 14 oz. gel</p>	<p>Menthol 1.25%, capsicum tincture, juniperberry oil, methsalicylate, salicylic acid, thymol in base of alcohol and water. Staining: No Irritation potential: Low Wrapping safety: Caution Need for gloves: No</p>	<p>Light green, highly aromatic liquid. Excellent as a post-work body brace, rub for tired legs and sore muscles. Enhances massage effectiveness. Disinfects and soothes insect bites and minor skin irritations. Mild counterirritant action so use full strength with caution when horses are hot and pores are more open. Ice fresh injuries for a few days before using counterirritants. Use with caution under wraps if inflammation is present. Observe horse for signs of irritation.</p>
<p>Body Bracer Emerald Valley 888-638-8262 www.emeraldvalleyequine.com \$16.95/16 oz.</p>	<p>Tea tree oil and peppermint oil in a base of glycerin, propylene glycol, water with emulsifiers and preservatives. Comes with a sprayer attachment. Staining: No Irritation potential: Moderate Wrapping safety: Caution Need for gloves: No</p>	<p>Milky liquid with strong peppermint odor. Slightly oily, which is a plus for massage work. However, no clear benefit over massage only, no obvious warming effect noted. One test mare developed a skin reaction with oozing and hair loss 24 hours after having this product rubbed in after exercise. Two other horses had no reaction, thus this was likely an individual sensitivity.</p>
<p>✓ Choate's Liniment Hawthorne Products 800-548-5658 www.hawthorne-products.com \$6.65/16 oz.</p>	<p>Menthol, camphor and capsicum in an acetone base. Staining: No Irritation potential: Low Wrapping safety: Mild caution Need for gloves: No</p>	<p>Highly aromatic and pleasant to use green liquid. Unsurpassed cooling effect from rapid evaporation of the acetone makes it an excellent choice for a body brace after exercise. Application before massage helps relax tense, painful muscles. Safe under wraps but may cause some skin scurfing. As with all counterirritants, use with caution, if at all, on acute injuries.</p>
<p>Durvet Epsom Salt Poultice 800-821-5570 www.durvet.com Kaeco Epsom Salt Poultice 800-228-1211 www.kaeco.com Gateway Magna Paste 888-474-6367 www.buygpdirect.com \$8 to \$10/20 oz.</p>	<p>60% Epsom salt, 1% methyl salicylate in a water-soluble base. Staining: Mild on white hairs, washes out Irritation potential: Low Wrapping safety: Mild caution Need for gloves: No</p>	<p>The product from all three companies appeared identical to us. Thick, mildly gritty paste with a strong and pleasant mint aroma, glue-like consistency. This product is a little difficult to work down to skin level and does leave a residue that needs to be washed off, but it's very effective for muscle soreness, especially when used under hot towels. Also reduces leg and joint swelling, even without a wrap.</p>
<p>✓ Equi-Block DT (Daily Treatment) Formula Miracle Corp 800-635-2044 www.equiblock.com \$14.99/16 oz.</p>	<p>0.25% capsaicin in a base of water, chamomile extract, gelling agents. Staining: No Irritation potential: Yes Wrapping safety: Do not wrap Need for gloves: Yes</p>	<p>Creamy consistency prevents running and waste. Pleasant aroma. The capsaicin in this product is a pain-blocker. Some effect after the first application but effect increases with time. Ideal for areas of chronic pain from arthritis or old soft tissue injury. There is an irritating, burning sensation with initial uses. Horses will vary in how they react to this. The sensation is temporary. Do not wrap treated areas. Do not use immediately after a hot bath or exercise, when the pores are open.</p>
<p>Equi-Block Leg Tightener and Liniment Miracle Corp 800-635-2044 www.equiblock.com \$14.99/16 oz.</p>	<p>3% menthol in a base of water, chamomile extract, gelling agents. Staining: No Irritation potential: Yes Wrapping safety: Caution Need for gloves: Yes</p>	<p>Just enough gelling to prevent running and waste. Penetrates quickly without a gel residue. Good choice for tight, sore muscles and temporary relief of joint stiffness in chronic conditions. Works as a counterirritant to improve blood flow. Some pain-relieving effects from the menthol. Use with caution under wraps, especially if there is any inflammation. Do not use on acutely inflamed areas. Do not use full strength after a hot bath or exercise, when the pores are more open.</p>
<p>Equibruise Emerald Valley Botanicals 888-638-8262 www.emeraldvalleyequine.com \$23.95/16 oz.</p>	<p>Devil's claw and arnica in a base of water, alcohol and witch hazel. Comes with attached sprayer. Staining: No Irritation potential: None to mild Wrapping safety: Mild Need for gloves: No</p>	<p>Thin liquid that looks and smells like iced tea. Definite cooling effect that makes it nice for use after work. Helped relieve lower leg acute swelling when wrapped, but not when unwrapped. Less obvious pain relief in acute conditions than with other arnica-based products in this trial, but should be safe to use with acute inflammation. We found this product pricey for its level of effectiveness.</p>

Product	Ingredients	Comments
Equine Amica Gel Tristan Jade Apothecary 480-626-4072 www.tristanjade.com \$15/8 oz.	Base of aloe vera with vitamin E, arnica, carrot seed oil. Staining: No Irritation potential: No Wrapping safety: Safe Need for gloves: No	Very faint, pleasant scent. Ideal thickness to prevent running and waste, but sinks into skin rapidly and completely with no gel residue. Nonirritating, nonheating. For muscle work, we suggest parting the hair in strips about ¼ inch apart to allow application directly to the skin. Massage in gently then let sit for 10 to 15 minutes before proceeding with massage. We did find less resistance/pain after using this product on one horse, another did not respond. Also helps relieve pain in joints/tendons or ligaments with acute inflammation.
✓ Espree Liniment and Body Brace Espree Animal Products, Inc 800-328-1317 www.espree.com \$12.95/32 oz.	Eucalyptus and salicylic acid in a base of water and isopropyl alcohol. Staining: No Irritation potential: Minimal Wrapping safety: Minimal caution Need for gloves: No	Mild liniment liquid with a pleasant eucalyptus scent, immediate surface cooling effect and delayed very mild counterirritant action. Best full strength as a cool-down for hot, tired muscles and legs. Helps cut through sweat and grime effectively as a body wash. Gentle, better for routine use than as a therapeutic but safe under loose, breathable wraps as a cooler for acute inflamed areas. Use as you would plain alcohol or witch hazel.
Equine Liniment Healing Tree 800-421-6223 www.healing-tree.com \$19.99/16 oz.	Peppermint and eucalyptus oils in a creamy base. Staining: No Irritation Potential: Minimal Wrapping safety: Minimal caution Need for gloves: No	Gentle warming liniment with pleasant aroma and good consistency for muscle work. Gentle enough to use for warm-up massage. Also good for relaxing stiff, tight muscles, tendons or ligaments after work. Good choice for minor joint stiffness and to loosen up areas of old injury.
Kendalls Super K Gateway Products 888-888-474-6367 www.buygpdirect.com \$9.47/16 oz.	Camphor, iodine, turpentine, oil of cade, thymol. Staining: Yes Irritation potential: Moderate to high Wrapping safety: Do not wrap Need for gloves: Yes	Brown liquid with slightly oily feel, slow to evaporate, iodine and turpentine scent. Antiseptic. Very effective on sore muscles and ligaments but leaves a slight film on the coat. Not a favorite for use in a body wash. Does work very well for ligament soreness and strain but beware of skin reactions.
Mineral Ice Straight Arrow Products 800-827-9815 www.manentail.com \$8/16 oz.	2% menthol, in base of water, gelling agents, thymol and magnesium sulfate. Staining: No Irritation potential: Moderate to high Wrapping safety: Extreme caution Need for gloves: No, but wash hands after use	Similar to human muscle rubs. Strong counterirritant effect. Best used for muscle stiffness and lower leg areas of stiffness from chronic arthritis or other injuries. Works well for stifle ligament soreness. Some horses show kicking and stomping beginning about five minutes after application. When applying, rub lightly only to get product down to skin level. Do not use massage with this product. Can be used in water as a body wash, but product does not dissolve or suspend easily. May cause scurfing with continued use.
✓ Refreshmint Body Wash and Leg Brace W. F. Young, Inc. 800-628-9653 www.absorbine.com \$12/16 oz.	Natural grain alcohol, witch hazel, menthol, spearmint oil, potassium iodide, iodine in a water base. Staining: No Irritation potential: No Wrapping safety: Safe Need for gloves: No	Very pleasant smelling, minty, nondrying liquid actually conditions skin. Can be used as a refreshing, one-step bath after exercise and does effectively cut through sweat and surface grime but you'll need more cleaning action for stains and heavy mud buildups. Safe for legs even under wraps, won't dry skin like alcohol but not much therapeutic effect if you're treating a problem area.
✓ Revive Sports Rub Aloe Advantage/Durvet 877-624-9693 www.aloeadvantage.com \$9.99/16 oz.	Methyl salicylate, aloe, eucalyptus, menthol, camphor in a water-soluble base with skin conditioners. Staining: No Irritation potential: None to minimal Wrapping safety: Safe Need for gloves: No	Thick, creamy, white liquid with pleasant minty smell. Flows easily like a liquid, but won't run. Rubs in quickly. Gentle but obvious warming effect. Our testers enjoyed the ease of use, rapid penetration and gentle nature of this product for routine leg and muscle care after a hard work.
✓ Sore No-More Liniment Equilite 800-942-5483 www.equilite.com \$16.95/16 oz.	Base of witch hazel containing extracts of arnica, rosemary, lavender and lobelia. Staining: No Irritation potential: No Wrapping safety: Safe Need for gloves: No	Liquid with a pleasant herbal aroma. No particular heating or cooling surface effect beyond the initial cooling. Free of counterirritant effects. Safe full strength under wraps, sweat wraps, tack or blankets, and safe to use on hot horses or with hot towels to encourage penetration. The only liniment in the trial that combines safety with both obvious pain relief and rapid resolution of swelling in acute conditions.
✓ Su-Per B-Oil Gateway Products 888-474-6367 www.buygpdirect.com \$8.03/32 oz.	Menthol, methyl salicylate, thymol, pine oil, salicylic acid, capsicum, juniper berry oil, in a base of alcohol and water. Staining: No Irritation potential: Low to moderate Wrapping safety: Caution Need for gloves: No	Thin, bright yellow liquid with pungent aroma. Formulated to be similar to Bigeloil, but suggested only for muscle use. Slightly stronger counterirritant effect. Works well as a body brace in wash water. Will cause skin scurf if used over inflamed areas (we had this happen on stifles) and some skin irritation may develop with regular full strength use.
✓ \$ Su-Per Liniment Gateway Products 888-474-6367 www.buygpdirect.com \$6.03/32 oz.	Menthol, wormwood oil, potassium iodide, thymol, chloroxylenol in an acetone base. Staining: No Irritation potential: Low Wrapping safety: Caution Need for gloves: No	Light green liquid with a predominantly acetone smell. Ingredient list is similar to Absorbine but without having the amounts specified we can't tell if it's truly identical. Cuts through sweat and grime well as a body wash. Splash on hot legs for a rapid cooling effect. Use with caution under wraps if active inflammation is present.

Product	Ingredients	Comments
Vita Oil Hawthorne Products 800-548-5658 www.hawthorne-products.com \$17.50/16 oz.	Turpentine, peppers, mustard flour and other spices in an oil base. Staining: Yes Irritation potential: Moderate Wrapping safety: Caution Need for Gloves: Yes (difficult to wash off)	Golden brown oil with a faint odor of turpentine. Unique long-lasting warming and relaxing properties when used with massage. The oil base keeps the active ingredients in close contact with skin. Also good for stifle strain or chronic stiff joints but will scurf if applied full strength over inflamed areas. Must be diluted for use under wraps. Check horse frequently for signs of irritation. One test horse developed painless skin swelling/welts at application sites. While we felt the oil base does prolong the action of this product, it's also messy.
White Liniment Durvet, Inc. 800-821-5570 www.durvet.com \$12.52/128 oz.	5% turpentine, 1.5% ammonium chloride, 1% camphor in base of stronger ammonia water and water with emollients and surfactants. Staining: No Irritation potential: Moderate Wrapping safety: Not safe Need for gloves: Yes	Extremely strong ammonia odor on opening. Thick, creamy consistency. Will not run. Use in a well-ventilated area. Ammonia has been used as a topical counterirritant in formulations dating back to the 1800s. It still works. This product rapidly provided good temporary relief of muscle spasm and pain. Can produce skin sensitivity with frequent daily use.
Yellow Liniment Blue Stallion/J.M. Saddler 800-827-2807 www.jmsaddler.com \$14/32 oz.	Thymol, menthol, methyl salicylate, capsicum, salicylic acid, juniper oil, pine oil in a 75% isopropyl alcohol base. Staining: No Irritation potential: Mild to moderate Wrapping safety: Caution Need for gloves: No	Pale yellow watery liquid with pungent minty smell. Mixes easily into water as a body wash, with good cooling and sweat-cutting properties. Use generously full strength with brisk massage for muscle soreness. Moderate counterirritant effects after initial cooling from alcohol evaporation. Use with caution under wraps, checking the horse frequently for discomfort. If using on a recent injury, ice the area for several days first to decrease acute inflammation.

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heavy work will soothe and invigorate hard-worked muscles.

- **Rubbed into the legs to soothe and relax after hard work.** Wraps may or may not be needed.
- **Massaged into tense, sore muscles or ligaments.** Apply the liniment per instructions and massage in.
- **Soothe stiffness and pain associated with chronic ligament/tendon or joint problems in the lower leg by applying full strength immediately before work.** Use only on a cool horse.

• **Decrease swelling in chronic injuries.** You can also ease swelling in fresh injuries once the acute inflammatory phase is over.

OUR TRIALS

We used our liniments both as routine post work-out care and on horses with muscle issues, sore joints or minor tendon/ligament problems. Our testers liked the convenience and less waste associated with gels or thick-cream consistency products. However, you can counter this problem by using a spray



Stronger solutions are not always best, and these products are our top picks for mild liquid liniments.

Follow Directions

When diluting liniments for a body wash after exercise, do not exceed the recommended amounts. Skin pores are wide open on a hot horse and the irritant effect is magnified. The stronger counterirritant liniments should also be diluted when using them under hot wet towels to treat muscle problems. Mix with water in the concentration recommended for bathing and soak the towels in the mixture. If treating the horse several times a day because of a muscle or leg problem, stop immediately at any sign of irritation such as kicking, stomping or pulling away. Counterirritants can cause skin damage, and each horse has a different tolerance.

When using any chemicals or herbal-based products on a horse, there's always the possibility of a sensitivity reaction. If you have a horse known to have

sensitive skin, always test using a small amount of product in one limited area. Allow 24 hours for any reactions to become obvious.

Expect areas overlying inflammatory reactions to be susceptible to adverse effects. Although never formally confirmed by studies, chestnuts may have more sensitive skin than other coat colors.

When using a liniment for the first time, do not massage vigorously, apply to a hot horse, use with heat, or use under a bandage. Never combine products, even in wash water, or use liniments in the saddle area if you plan to ride soon.



Witch hazel is a good choice to dilute liniments.



Absorbine Liniment is a classic choice.

bottle to apply the liniment to the skin then brace it into the leg as you normally would. We prefer liquids as they more easily mix with wash water and penetrate to the skin level easier. Testers also worried about skin irritation potential, safety under wraps and advisability of using gloves when applying the products. We've included that information

for each liniment in our chart.

BOTTOM LINE

Our overall pick for safety in both acute and chronic conditions, versatility (body wash, muscles, legs, with or without wraps), pain relief, rapid inflammation control and low irritation potential is still the herbal-based Sore No-More from Equilite.

If you prefer traditional, counterirritant-based products, the three heavy hitters are Absorbine Veterinary Liniment, Bigeloil and Choate's Liniment, all similarly priced and multi-purpose.

If you prefer thicker products, our top three performers are Absorbine Veterinary Liniment gel (if you prefer the classic ingredients), Arnica Rub (excellent pain relief) and Revive (very gentle, safe for routine use).

When you don't really need a thera-



Gels are less messy to use, but we find they don't penetrate to the skin as quickly as most liquids.

peutic effect, but you want something to use as a body brace after work, consider Gateway Su-Per B-Oil or Su-Per Liniment, Absorbine Refreshmint, or Espree Liniment and Body Wash. Gateway Su-Per Liniment is our Best Buy.

Finally, if you're considering a liniment because your horse has significant pain from an issue like chronic arthritis or other injury, we believe that Equi-Block DT is the product for you.

Article by Horse Journal staff. [E]

Ingredients In Liniments

The goal of most liniments is to first cool, next provide a counterirritant/warming effect that improves blood flow, and finally, to relieve pain. The first effect is cooling, followed about 15 minutes later by warming, as the local irritation kicks in. You may even note that the horse's skin feels warmer where the product was applied. The chemicals in the liniments also keep the local nerves occupied so that pain sensations are diminished for one to several hours.

Individual ingredients are responsible for specific sensations. Acetone, alcohol and witch hazel evaporate rapidly, contributing to the cooling effect. Menthol, thymol, mint, camphor, ammonia, eucalyptus and salicylates also produce a sensation of coolness (without actually cooling) when first applied, but these are actually counterirritants, producing mild skin irritation to encourage blood flow. They also have a local anesthetic effect, as does capsicum (red pepper).

Tea tree oil, chloroxylonol and iodine are both mild counterirritants and disinfectants. Magnesium sulfate is both a drawing agent and an anti-inflammatory. Many of the plant oils and extracts chosen for liniments also have counterirritant effects although some are also analgesic, like arnica. Chamomile, calendula and aloe are topical anti-inflammatories.

Liniment, Paint, Tightener, Sweat

Liniments can be defined as multipurpose products that do double-duty both as body washes and for treatment of mild to moderate muscle, joint or other soft tissue pain.

Leg tighteners contain drawing agents like mineral salts or ammonia. Their primary purpose is to draw fluid from the tissues.

Paints are stronger counterirritants than liniments as a rule, using such things as mercury or high concentrations of iodine.

Sweats are also primarily used to draw fluid from an area but their ability to trap heat can make them useful for stiff joints. Sweats contain agents like glycerin or polyethylene glycol that form a tight seal on the skin. Sweats are then covered with a standing bandage and a nonbreathable layer like plastic wrap or wax paper.

Counterirritants And Inflammation

While liniment body washes and rubs can help speed resolution of minor exercise-related stiffness and soreness, they should be avoided with fresh injuries that have significant amounts of heat, swelling and pain. In that scenario, the area is already highly inflamed and you don't want to make it worse. The horse will also be at very high risk of having a nasty skin reaction to the liniment. Use Sore No-More on acute conditions, or treat the area with ice and ice water wraps until the acute inflammation has subsided (usually in about three days).