

Swiftsure Equine Veterinary Services

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Pastern Dermatitis

Cases of Pastern Dermatitis, also commonly called, “scratches” or “mud fever”, are very difficult to treat. There are several inherent factors that are weakening the horse’s system and permitting the infection to continue. In order to clear the infection, we need to address all the factors simultaneously, otherwise treatment will fail, and the infection will persist. Here are the factors that must be addressed:

1) Immune System and Skin Health:

Most horses with healthy immune systems are less likely to develop this infection, and are more likely to clear it quickly. A horse with dermatitis has a weakened immune system so in order to help strengthen it we must make sure he is getting:

- a) **Quality Hay** which would be high enough in protein and digestibility and low enough in carbohydrates
- b) **Complete Vitamin/Mineral Supplement** in adequate amounts
- c) **Zinc supplement**, as it helps with skin integrity. This can be found in hoof supplements or as a Zinc Methionine supplement from Integrity Sales & Distributors
- d) **Omega Fatty Acids** which help with inflammation and skin health. This can be found in Flax oil, Hemp oil, or cold pressed oils like Camelina Oil given at about 1/8 cup daily or FRESHLY GROUND flax directly from whole seeds given at 1 cup daily
- e) **Vitamin E** (human grade) which is good as a free radical scavenger. It's given at 3000-5000 IU daily.

2) Environmental Stressors:

Nine times out of 10 the only horses we see with scratches are those either housed or worked in sand rings.

- a) **Sand** is extremely abrasive and is likely causing microtears in the skin permitting the infectious pathogens to penetrate into deeper tissues. Sand rings and paddocks should be avoided completely until the infection has resolved. If this is not possible, then the legs should be protected at all times with DRY bandages.
- b) **Clipping** can also cause microtears in the skin and allow the sand to cause more damage. Once the infection has resolved, the legs should not be clipped if he's being worked in sand rings.
- c) **Moisture** is our enemy. The bacteria and fungus love moist and low oxygen environments. So bandaging can be detrimental when trying to treat the infection as it in itself creates a damp and low oxygen environment which the pathogens love. So keeping the horse in as dry of conditions as possible - dry stalls, dry paddocks, and drying the legs thoroughly daily with towels or even hair dryers.

3) Infectious Agents:

The infection is a mixed bag of bacteria and fungus that are found all over the environment. They do not cause problems unless the other contributing factors are present. We must treat both pathogens simultaneously as they aid each other in survival.

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- a) **Clean the Scabs Daily** with HIBITANE specifically. The skin should be gently scrubbed. If the scrubbing is too aggressive it will cause tears in the skin for the bacteria to penetrate deeper, but if too gentle the scabs won't be removed, which provides a low oxygen environment for them to hide. So gently scrub, enough to remove scabs that want to come off, but not so hard as to cause bleeding or reddening of the tissue.
- b) **The Skin Must Be Very Thoroughly Dried.** Remember, moisture is our enemy because bacteria and fungus love moist and low oxygen environments
- c) **Treat the Bacteria with Antibiotics** either topically or internally. For the fungus we treat it topically, as a spray or ointment only. Application of topical ointments is a careful balance too. You need enough for it to kill the pathogens but not too heavy as to create a moist and low oxygen environment.

Pastern Dermatitis is a complicated and complex infection to treat. It is often a long and uphill battle that must start with addressing all the contributing factors at the same time. Please diligently follow these instructions simultaneously in order to achieve the best outcomes.