

Skin Problems! What Are Your Alternatives?⁰

By Frances Fitzgerald Cleveland

A horse's skin breathes, radiates, flutters at your touch and protects. It is the first to signal you that there are imbalances within its system – internally or externally. So how will you treat these imbalances? One way is a holistic approach. Why? Well, let's look at the horse's skin first.

Your horse's skin is its largest organ, ranging from 12 - 24% of your animal's weight, depending on age. There are three major layers that make up your horse's skin. These various cellular and tissue components consist of the *epidermis*, *dermis* and *subcutis*.

The outermost layer of your horse's skin is the *epidermis* and it is avascular, meaning it is lacking of blood vessels. Within the epidermis are three major cell types: the majority of cells are composed of keratinocytes, which manufacture the keratin in your horse's skin. The other major cell types in the epidermis are the melanocytes, which produce skin pigment, and langerhans cells, which are responsible for generating immune responses in the skin. They do this by processing antigens in certain hypersensitivity states, such as an allergic reaction or contact dermatitis. This is the layer where you will find the major epidermal appendages, such as hair, hair follicles, sebaceous glands and sweat glands. Note these appendages also extend down to the dermis.

The next layer is the *dermis*, it is the thickest major layer and provides the skin with most of its bulk. It is made up of connective tissue fibers which consist of 90% collagen, which is the major protein constituent of the dermis, and 10% elastin, which provides the skin with its suppleness and elasticity.

Finally, the third and innermost major layer of the skin is the *subcutis* also called *hypodermis*. The subcutis is composed of fat cells and thin strands of collagen containing connective tissue. Within this layer the nerves and blood vessels supplying the skin weave their way through the strands of connective tissue to reach the dermis that lies above it.

This intricate composition of cells, tissues, chemicals, blood, nerves and energy is simply called skin. Yet, it has one of the most important jobs of the horse's body - protector. Your horse's hair provides mechanical protection and acts as a filtering system and insulator. The superficial layer of the epidermis with its highly developed, tough, durable, flexible membrane acts as a chemical and waterproofing structure. The skin provides protection from the sun's rays and it regulates your horse's temperature through its sweating mechanism. The skin tells you if the horse's immune system is out of balance. "If you see an allergic reaction skin problem on a horse you know the whole immune system is overreacting," comments Dr. Allen Schoen, author of the newly released book, "*Kindred Spirits*".

With an allergic reaction the immune system is overreacting to an allergen and manifesting in the skin. A way to treat this situation is holistically. What does holistic mean? Webster's Dictionary defines it as: "incorporating or identifying with the principles of holism; pertaining to or using therapies outside the mainstream of orthodox medicine," such as Chiropractic, Homeopathy, Traditional Chinese Medicine (TCM) or Aromatherapy. A commonly used description of holistic is to consider the entire being, in

body, mind and spirit. How can this pertain to the skin? Let's look at hives (urticaria). When a horse breaks out in hives all over his body we often view it as a physical problem. Another question to ask yourself; "Is the horse under stress?" Dr. Shcoen says, "A horse can appear more nervous or agitated with hives as their skin is more hyperirritable."

Horses might be confronted with a number of skin problems. They may encounter bacterial skin diseases, such as rain rot or scratches, also known as dew poisoning. There are fungal skin diseases such as ringworm. Horses also suffer from warts, a viral skin disease; parasitic skin diseases such as mange (scabies), lice and midline dermatitis. Some horses suffer from saddle sores, sarcoids (benign skin tumors), dandruff, photosensitization, itchy skin and as mentioned before, allergic skin reactions, such as hives and sweetitch (an allergic reaction to the bites of tiny insects belonging to the genus *Culicoides*, *midges*, *no-see-ums*).

Skin problems are challenging and the examples above are no exception. It is important to understand that there is more than just a cosmetic or superficial problem occurring, some of these skin problems can indicate an internal problem. "Skin diseases are the most challenging problems in the veterinary practice. The challenge is partly related to the unique anatomy and physiology of the integument. The skin is the boundary between the inside of the animal's body and the external environment and plays a unique role. A skin disease is just a sign of a body with internal disorders," says Dr. Huisheng Xie DVM, PhD, MS a clinician of Veterinary Acupuncture and Chinese Medicine, Veterinarian Medical Teaching Hospital, University of Florida.

When considering the horse and its skin problems, it is important to look at your horse's entire system. "Many skin conditions originate with digestive or immune problems," states Dr. Madalyne Ward of Bear Creek Clinic in Austin, Texas. The skin can be looked at as a complex gauge of your horse's general health. For this reason, one should look at the horse and his skin disorder holistically. "The joy and frustration of holistic medicine is every animal is an individual and you need to treat everyone differently," says Dr. Joyce Harman of Harmany Equine Clinic in Washington, Virginia.

Your choices are many when considering various holistic modalities, a holistic veterinarian or practitioner. A few of your choices are Homeopathy, Nutrition, Acupuncture, Traditional Chinese Medicine (TCM), Herbs or Aromatherapy. You might ask "what are these modalities, how do they work and how do I find a holistic veterinarian or practitioner?"

Homeopathy & Nutrition

Homeopathy

According to Dr. Ward, "Homeopathy is a system of medicine based on the principle that 'like cures like'." Samuel Hahnemann, the founder of Homeopathy, was the first person to purposely utilize this method of treating disease. Hahnemann began to treat patients according to the principle of using minute doses of the medicines. He discovered that they would not only respond, but would have few of the side effects that were so common to the medications used by more conventional practitioners. He

theorized that the homeopathic remedies, in their minute doses, carefully selected to match the patients' symptoms, gave the body the information it needed to heal itself.

There are over 1,500 known homeopathic remedies made from animal, vegetable or mineral sources. Therefore, it is important when considering Homeopathy for your horse to find a person qualified in Homeopathy. It is essential the practitioner conduct a thorough evaluation of your horse and its skin problem. "It is very complex to treat skin problems there is no nice formula out there. Homeopathy is very tailored to the individual animal so the more history you get the better off you are and the reason for this is because you are working with the horse's immune system and this is a very complex system. The goal is to stimulate and balance the immune system, not over-stimulate. You have to look at the animal in a holistic way in order to get the remedy." says Dr. Harman.

A way of looking at your horse holistically is to consider its past history, personality, and injuries. Old scars, for example, could indicate that the horse was on antibiotics at one time and as a result the horse's stomach is out of balance. If that were one of the issues, then both Dr. Harman and Dr. Ward would recommend a pro-biotic for the horse. It is also important to discuss if the horse is receiving a nutritionally balanced diet. "In my practice hives is the most common skin condition I see. Hypersensitivity to insects is a close second. Homeopathy and nutritional support will help almost all of these cases," says Dr. Ward.

Dr. Ward goes on to say, "Hives respond well to diet management and the addition of a high quality human grade pro-biotic and digestive enzyme. It can take 1 to 3 months to see a significant improvement. Hypersensitivity may take several years to clear completely. I have had good results when holistic treatment was used. Management is very important and can limit results. For example, if a horse is allergic to molds and still has to live in a damp barn."

Dr. Ward and Dr. Harman both use Homeopathy when dealing with horses and their skin problems. Because Homeopathy is individually specific it would be impossible to list the remedies. "Homeopathy is tailored to the individual, and there are 20 to 30 commonly used remedies to choose from, therefore I would hate to give a list because they are so case specific," says Dr. Harman.

Both Doctor's agree on the importance of providing nutritional support to your animals. Nutritional supplements help support the immune system. Dr. Ward suggests Blue Green Algae, Pro-biotics and Cell Tech Original Enzymes. For more information on how to use these products you can contact Dr. Ward at her website and Cell Tech's Website which are listed at the end of this article.

Dr. Harman suggests a whole grain diet, Rush Creek Minerals free choice by Advanced Biological Concepts (ABC), and Pro-bi also offered through ABC. If you want to give your horse free choice salt, you can offer them sea salt. The Grain & Salt Society offers an agricultural salt or ABC offers a free choice salt. "Free choice minerals are better than the red salt blocks we all throw out for our horses. The red salt blocks are 95% salt and 5% minerals and they don't get all the minerals they need from that salt block," says Dr. Harman. She also finds that if there is a problem with your horse's immune system it will crave and eat a lot of minerals to repair the body.

Traditional Chinese Medicine (TCM)

Traditional Chinese Medicine (TCM) is a term used to describe a system of medicine developed and practiced in China. The earliest written records of TCM date back 3,500 years. It is a modality that works on the principles and concepts of balancing a pair of opposites (i.e.: Yin and Yang), and Qi, the vital force or life force is both energy and matter. It believes disease may be caused by internal and external factors.

Dr. Xie says, “Traditional Chinese Medicine approach is to emphasize on the body as an organic holistic one. The TCM practitioner has to identify the etiology, the location of the lesion, the pathologic changes and body conditions on a basis of analyzing and summarizing the patient's symptoms and signs.” It is up to a qualified TCM practitioner to discern this information.

“To identify a TCM diagnostic pattern involves discerning the underlying disharmony by considering the picture formed by all the symptoms and signs. Rather than analyzing these symptoms and signs one by one Traditional Chinese Medicine forms an overall picture by taking all the symptoms and signs into consideration,” says Dr. Xie

Dr. Xie expresses that he sees two categories of equine cases with skin problems; the first being the patient who fails to respond to conventional medicine, and the second is when the owners want to pursue complimentary therapies including TCM. Two examples he gives of the complimentary approach are in his treatment of Urticaria (hives) and skin allergies, described below.

Dr. Xie describes Urticaria (hives) as skin hypersensitivity disorder mostly associated with a variable of allergens. If the allergen cannot be identified or avoided, he proceeds with his TCM treatments. “Urticaria is called "Lung Wind Heat Pattern" (or fei wind huang) in TCM. Lung Wind Formula is designed for this condition and has been used since the Ming Dynasty (about 600 years ago). Ingredients in this formula include Scutellaria root, Gardenia Fruit, Artemisia, Dioscorea stem, Anemarrhema rhizome, Fritillary bulb, Coptis root, Phellodendron bark, Forsythia fruit, Rhubarb root, Curcuma root, Schizonepeta, Ledebouriella root, Mentha, Licorice root,” explains Dr. Xie.

Another example Dr Xie describes is the treatment of dermatitis. “Dermatitis is called "shi zhen" in TCM. The most commonly seen patterns of this condition include Wind-Heat, Damp-heat, and Blood Deficiency. Differentiating those patterns requires extensive TCM knowledge...For instance, a red tongue, excessive pulse, and itching skin is described as Damp-heat Pattern. There is a specific Chinese herbal formula called "Shi-re-fang (Damp-Heat Formula)" for this pattern. Acupuncture is also used to clear the pathogens of Damp-heat. As you can see, TCM practice is based on its own foundation and theories.”

Skin problems can be challenging, but Dr. Xie states that the equine skin cases he has seen have responded to TCM treatment extremely well. His percentages speak for themselves: 50% of the horses

had no clinical signs at all after TCM treatments, 40% showed some improvement, and 10% had no reaction.

Aromatherapy

Aromatherapy is the use of pure essential oils. Essential oils are extracted from plant parts (flower, leaf, blossom, petal, resin, tree, bark, root, twig, seed, berries, rind and rhizome) by way of distillation, expression or maceration. Essential oils are highly concentrated extracts and they contain hormones, vitamins and antiseptics (75-100 times more concentrated than dried herbs). Some of their uses are antiseptic (prevents or combats infection locally), bactericide (kills bacteria), bacteriostatic (inhibits growth of bacteria) and cytophylactic (promotes cell rejuvenation when applied to the skin).

The term “Aromatherapy” was coined in France (Aromathérapie) in the early 1900’s by Dr. René Maurice Gattafossé to describe his work with essential oils. In the book “*Gattafossé’s Aromatherapy*” according to Dr. Gattafossé, essential oils are widely used for their antiseptic and bactericidal properties and they possess anti-toxic and antiviral properties. He also stresses the oils have extensive therapeutic properties and an undeniable healing power.”

When considering Aromatherapy as a form of treatment remember that what works for one horse may not work for another. For skin problems, it is important to look at the whole horse and evaluate what they may need by consulting a qualified Aromatherapist.

Take the case of Nadine, a beautiful Bay Quarter Horse Mare. The owner contacted me regarding Nadine’s skin problem and her extreme moodiness. Nadine’s skin problem resembled “sweet itch”, I found, but was never successfully diagnosed by the vet. The mare had extensive hair loss and a rash that extended from underneath her neck all the way down her stomach. The reason for her moodiness was never determined. After our consultation, Nadine was given four essential oils: Ti-Tree, Carrot Seed, Lavender and Vanilla, described below.

Ti-Tree oil has anti-infectious, anti-inflammatory, antiseptic, fungicidal and immune stimulant properties. Carrot Seed oil, an excellent immune stimulant, skin aid, stimulates cell repair, helps to keep coat, gums and teeth healthy. Lavender oil has immune stimulant and vulnerary properties, (an agent that helps heal wounds and sores by external application). Lavender oil is also very soothing and helps with nervous tension or stress-related conditions. Vanilla oil helps to ease tension, balances the hormones, and acts as an excellent anti-depressant. In addition to these oils “Pete’s Equine Remedy”, a product made by Frog Works with pure organic essential oils, was also used on Nadine. This product was designed to heal the damage caused by skin problems, such as sweet itch, over-rubbing, ringworm, rain rot, dermatitis etc.

Within two weeks of using the oils and “Pete’s Equine Remedy”, the owner reported that Nadine’s skin condition was “*completely healed*” and her hair was already growing back! Plus Nadine’s mood was restored to a pleasant demeanor and working with her was much more enjoyable.

The horse's skin is very complex. It is the horse's revealer. Therefore, the next time a skin condition appears try to look at the situation in a holistic way. As stated earlier, every horse is different and may need its own specific remedy. Remember that when considering Homeopathy, TCM, Herbs or Aromatherapy, it is important that you contact a qualified practitioner or a veterinarian qualified in these modalities. So, be good to your horse and listen to its skin.