

Chapter 37

Homeopathic Medicines used to Treat Various Internal, Muscular, Joint and Skin Diseases in Equines

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ABSTRACT

There are multiple problems treating in various muscular, joints, skin, and internal diseases of equines with synthetic drugs. To avoid all the contraindications and complications of the synthetic drugs, natural remedies are the best alternative solution. Among all the alternative methods to treat the diseases of the equines, homeopathy is the best suitable option. Homeopathic treatment has the least side effects, and it is the least toxic. Homeopathy is secure, it is based on three principles: infinitesimal individualization of the cases, and similarity. Homeopathic treatments, when used alone or in combination with antibiotics, are effective in treating bacterial infections in both humans and animals. In this chapter, we will discuss the different internal, muscular, joints, and skin diseases of equines and their treatment with homeopathic medicines.

KEYWORDS

Homeopathy, Homeopathic medicine, Equines, Problems, Treatment

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INTRODUCTION

Homeopathy is a natural method used for both acute and chronic horse illnesses that helps in the restoration of the animals' health (Bergh et al., 2021). The name "homeopathy" comes from the Greek terms "pathos," which means suffering, and "homoiōs," which means "like" (Goswami and Dey, 2022). Although the initial purpose of homeopathy was to heal equine, it was created in 1796 by Samuel Hahnemann that animals would probably also benefit from homeopathic treatment (Avcioglu and Boyacioğlu, 2024). Homeopathy is secure, it is based on three principles: infinitesimal individualization of the cases and similarity (Ijaz, 2020). Studies have indicated that homeopathic treatments, when used alone or in combination with antibiotics, are effective in treating bacterial infections in both humans and animals (Nayak and Varanasi, 2020; Varanasi and Nayak, 2020; Yalgi, 2022; Aditya et al., 2023). It is applied generally, much like remedies as we are aware, human and equine muscle physiology is identical, used in the therapy of muscles (Lage et al., 2020; Reis et al., 2024). In addition, it is used to improve their growth and production and to cure a variety of bacterial, viral, and parasite illnesses as well as nutritional inadequacies and stress (Bergh et al., 2022; Datta, 2020; Lingeswaran and Mohan, 2024). Numerous inflammatory conditions, such as persistent gingivitis, both acute and chronic diarrhea, respiratory ailments, renal insufficiency, behavioral issues, and more, can also be treated with it (Alex, 2020). They are also used together with allopathic medications to minimize side effects (Aphale and Sharma, 2022; Patel and Patel, 2022). Maximum outcomes are achieved by the internal management (Siddique et al., 2023). Equine homeopathic remedies *Pulsatilla*, *silicea*, *lycopodium*, *calcarea flurica*, and *ledum* are frequently used (Fleming, 2002).

Natural Remedies for Internal Problems Immune System

Many herbs and natural products are used to treat different immune problems in equines (Williams and Lamprecht, 2008; Elghandour et al., 2018). *Echinacea* spp. are the most commonly used natural products used as immunomodulatory agents (Senchina et al., 2011; Eldin et al., 2021). It is also known as Coneflower (Petrova et al., 2023). There are 9 species of *Echinacea*, but *Echinacea purpurea*, *Echinacea angustifolia*, and *Echinacea pallida* are tested and proven effective in boosting the immune system (Fu et al., 2021; Burlou-Nagy et al., 2022; Kakouri et al., 2024). There are multiple uses of

these plant products, but mainly they are used as supportive therapy for treating respiratory tract infections and common colds (Willcox et al., 2020). Results have shown that Echinacea has a very wide scope for pharmacological activities (Burlou-Nagy et al., 2022). It reduces the severity of the ailment and the duration of symptoms of the problem (Xu et al., 2021). Echinacea activates the innate immune cells and improves immunity. Sulphur is another naturally occurring compound which enhances the immune mechanism of the body (Tadele and Zeressa, 2021). Research shows that compounds containing sulphur have significant effects on the humoral immune system (Lesyk et al., 2022; Pozzi et al., 2022). The highest effect on the stimulation of immune system is observed by a sulphur compound Diallyl disulfide (DADS) (Jikah and Edo, 2023; Sonaji et al., 2024). According to results from another research shows both an increased number of plaque-forming cells and increased titer of antibodies (Park et al., 2022).

Liver

Liver plays a significant role in detoxification and metabolism (Esteves et al., 2021). Any damage to the liver can lead to numerous health problems or severe ailments (Devarbhavi et al., 2021). Dandelion, a natural product, is a very good hepatoprotective agent (Mahboubi and Mahboubi, 2020; Pfingstgraf et al., 2021). Dandelion has a significant role in the detoxification of the liver (Wang et al., 2022). It is present as ad libitum in the grazing tracts of the horses (Schlittenlacher, 2022). Leaves of Dandelion help in the digestion and increase of appetite (Li et al., 2022). Other functions of this natural product include antioxidant properties, detoxification of gallbladder, and improves kidney function (Kour et al., 2020; Mahboubi and Mahboubi, 2020; Li et al., 2022). It also has diuretic properties which ultimately help in removal of water and salts from the kidney (Suljević et al., 2022).

Poisoning

Poisoning is caused by ingestion of toxic plants (Okereafor et al., 2020; Awuchi et al., 2021). It happens mostly when the horse has nothing else to eat, so they eat harmful poisonous plants, herbs, or forages (Cappai and Aboling, 2020; Aboling, 2023). Most prone equine specie to poisoning is the donkey because of its management and environment habitat (De Santis et al., 2021; Furtado et al., 2022). Some of the poisonous plants include *Digitalis* spp., *Juglans nigra*, *Acer rubrum*, and *Ranunculus* spp. (McCullough, 2022; Singhurst et al., 2022). If the horse has taken any of the poisonous compounds, it can be treated by various natural products (González and Vallejo, 2021). Ginger, aloe vera, turmeric, and peppermint can be used against poisoning (Yassin, 2023). Ginger has very good digestive, anti-inflammatory, antioxidant, anti-thrombotic, and anti-bacterial properties (Williams and Lamprecht, 2006). Hence, used as an agent against poisonous products (Yassin, 2023). The major constituents of ginger are gingerol, myoga, and paradol (Deng et al., 2022).

Natural Remedies for Treatment of different Joints and Muscle Problems

Arthritis

Arthritis is the common condition of the bone in equines, which causes stiffness, pain and decreases functionality (McIlwraith et al., 2020). It mostly affects the quality of life of adults and older adults. Most common problem which occurs due to arthritis is lameness and horse cannot be used in any game or competition, results in retirement (Holmes and Brown, 2022). Lameness can be corrected with the help of exercise. Rhus Tox is a naturally made product which has been proven very effective in the treatment of arthritis (Goswami et al., 2022). Rhus tox increases the expression of COX-2 and decreases NO formation, which will ultimately have anti-inflammatory response (Khalil et al., 2021). It also acts as an immunomodulator, it consists of urushiol (Ghosh et al., 2024).

Muscle Stiffness

Major cause of the disability in equines are muscle disorders, which include mainly the muscle stiffness in the back muscle of the horses (Story et al., 2021). Muscle stiffness is caused by the deficiency of Vitamin E, sodium or calcium (Raskh, 2020). Blood of horses may exhibit the increased activity of the enzymes which work in the muscle (Arfuso et al., 2022). Correcting dietary deficiencies and metabolic imbalances may cause relief from muscle stiffness. Ruta graveolens, also known as Rue, is used as anti-inflammatory medicine and has proven helpful against muscle stiffness. Rhus tox is also used for the treatment of muscle stiffness (Vinita et al. 2024).

Natural Remedies for the Treatment of Skin Related Problems

Equines are important for different activities, so we need healthy animals having a good skin coat

Warbles

It is caused by *Hypoderma Bovis* and *Hypoderma lineatum* which causes painful and large swelling on skin (Jamil et al., 2023). It can be treated by incising tumor and then by application of Sulphurous acid 3 times a day (McClure, 1917).

Lice

Damalinia equi and *Haematopinus asini* infest equines. *H. asini* is present around the tail base, above fetlock hairs which causes itching. Animals feel irritation and scratch their body, which damages skin. For treatment or eradication of louse wash harness with hot water. Apply olive oil to damaged skin. Sulphur ointment can also be used. If an eruption occurs, use Arsenicum thrice a day (Alipour and Goldust, 2015).

Scabies

It is caused by *Demodectes equi*, *Sarcoptes equi*, *Symphiotetes equi* also known as itch or mange. Mites burrowed in skin causes irritation and eruptions. Always wash your whole body with warm water and soft soap and then dry the skin. Zinc, neem, tea tree oil, clove oil, turmeric, aloe vera and cayenne pepper are used for killing of these mites. Sulphur ointment can also be used (Nasir et al., 2023).

Erythema

Friction between skin folds causes erythema. Clean the affected part, dry it properly, dust with fuller's-earth. If it is caused by saddle/collar pressure to remove the saddle collar and apply Arnica Lotion. To treat sit fast, remove affected hard skin and dress wound with Calendula Lotion. Cracked heels can be treated by clipping hairs and poultice with bran. Sulphorus acid is used to treat ulceration and also give 10 drops of Arsenicum. Application of Sulphurous acid by a camel's-hair pencil heals chapped teat (Williams, 2024).

Hives, Stings and Bites

Apis Melliflucis is used for treating swelling and itching caused by bites and stings of insects, spiders, snakes, scorpions, and honeybees. Rhus Tox is useful for treating hives. Ledum palustre prevents and treats reactions caused by bites of insect (Sile, 2021).

Warts, Tumors, Sarcoids, Papular Eruptions and Reactions

Warts or sarcoids are tumors of skin which can reoccur caused by Bovine papillomavirus (BPV), primarily types 1 and 2. Thuja is used for treatment of styes, tumors, sarcoids, warts, skin tags and reaction at injection site or due to vaccination. Belladonna, Arsenicum and Sulphur treat papular eruptions (Pudale, 2022).

Ringworm

Ringworm is caused by keratinophilic fungi mainly by Trichophyton species and Microsporum species. It is major health concern among human and animals. Bacillinum 200 per month is given for treatment. Kali arsenicum 200 restores normal skin and is given daily for seven days (Husain, 2020). Before giving a bath to animals, apply hot mustard oil.

Mud Fever

It is seborrheic dermatitis of the lower limbs, which is chronic in nature. Also known as scratches. Wash and clean with lukewarm water and glycerin, then dry it with cloth. Poultice with turnips and boiled carrots if there are scabs or discharge. Sulphurous acid Lotion and Arsenicum 10 can be used (Kalaghatagi, 2020).

Adverse Effects

Homeopathic medicines are usually safe and without significant adverse effects, since they consist of only a small amount of a highly diluted substance (Hawke et al., 2022). So, the chances of causing direct toxicities are less. Many homeopathic products are being used to treat different diseases and conditions in horses. However, if any homeopathic products have not been reviewed by the drug regulatory authority (like the FDA) for safety or effectiveness in treating, curing, preventing, or elevating any diseases or conditions, they can impose serious effects on animal health. Adverse effects can occur if a combination of different homeopathic medicines is given to a horse, which are antagonists and can disrupt the normal body function of the horse. We think homeopathic products are natural, and they don't produce adverse effects on the animal's body. 'Natural product' does not mean a lack of adverse effects. Homeopathic medicine can cause fatal effects on equine health if it is present in higher quantities or if the horse is allergic to any ingredient present in that particular medicine. Some homeopathic products were identified as containing higher doses or ingredients other than those listed on the label. There is also less research work in the field of veterinary homeopathy. Common adverse effects induced by homeopathic medicine include hypersensitivity, dermatitis, abnormal intestinal motility, and allergic reactions. Nux vomica, Rhus tox, arsenic, Arsenic, and chomomilla are commonly used ingredients in different homeopathic products and can cause Acute pancreatitis, melanosis, keratosis, skin lesions, severe swelling, bleeding, and rashes Tincture of aconite contains aconitum, which is used to treat fear, anxiety, restlessness, and acute sudden fever in horses. Aconitum intoxication causes severe bradycardia, a reversible panconduction defect, hypotension, and syncope in horses (Chung, 2004).

Conclusion

Homeopathic medicine has been proven very effective against multiple diseases of equines. Natural remedies have been in use since long. These drugs have a potential to treat various diseases and problems in equine family. Homeopathic medicines have multiple medicinal properties out of which their immune boosting activity is the most helpful for the treatment and prevention of different diseases and disorders. In this chapter, we have concluded that the herbal or homeopathic medicines have very positive effects in the treatment of internal, muscular, joints, and skin problems. However, the safety index of some drugs should be monitored by conducting multiple experimental designs.

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