

Treating Orthopedic Pain in Dogs and Horses Phytotherapeutically

Certain plants can prevent disease in pets as supplementary feeds and contribute to greater well-being and quality of life. Many pet owners are showing an increasing interest in alternative therapies such as phytotherapy. Medicinal herbs are available as individual components or mixtures and can be added to the feed. Medicinal herbs are also possible as an ingredient in canned food. Four medicinal herbs in particular have proven effective for treating orthopedic conditions in animals using herbal medicine. In an online workshop "Orthopedic pain in dogs and horses phytotherapeutic treatment", organized by the company Kräuter Mix GmbH, the medicinal plants willow, meadowsweet, frankincense and curcuma were presented and their areas of application and mode of action described. The family business from Abtswind offers dried herbal raw materials such as medicinal plants, culinary herbs, dried vegetables as well as spices and thus exactly the ingredients that are important for a balanced diet for pets and farm animals.

Curcuma

Curcuma, also called turmeric, belongs to the ginger family and is mainly cultivated in Asia and Africa. The dried rhizome is used therapeutically. Curcuma contains curcuminoids and essential oils. Turmeric is fat-soluble and is poorly absorbed by the body because it is rapidly broken down and excreted in the liver. Therefore, for a therapeutic effect, a high initial dosage in the form of a high-quality raw drug with a high curcumin content is necessary. Curcuma can be combined with various substances, e.g. with black pepper or with fat. It has a strong anti-inflammatory and antioxidant effect, improves blood



Curcuma



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flow properties, protects the liver, has a bilious and anti-itching effect. In certain tumors, curcuma can affect tumor cell growth, as test tube studies have shown. It can be used for inflammatory edema and acts similarly to a classic painkiller such as diclofenac or ibuprofen. In people with knee joint arthrosis, a similar effect is achieved in acute chronic symptoms as with treatment with cortisone. In contrast, however, there is a much lower risk of gastrointestinal ulceration or acute poisoning reaction.

For horses, curcuma is used for degenerative joint diseases, such as chronic osteoarthritis. It has a cartilage-protective effect and ensures that fewer pro-inflammatory and cartilage-degrading substances are formed in the body. Curcuma can also be used in dogs for osteoarthritis, thus relieving pain and reducing inflammation. In some cases, joint function can even be restored. Curcuma can be used alone or in combination, for example with frankincense. Green tea potentiates the effect. In combination with green tea, horses with liver inflammation, for example, showed lower inflammatory reactions. Curcuma is versatile: it can be used for gastrointestinal diseases as well as for rheumatoid arthritis, for pain and inflammation of various kinds, for respiratory diseases as well as for colic. Curcuma is also suitable for animals as a

local application on the skin, e.g. for skin inflammations or poorly healing wounds. Caution is indicated when taking blood-thinning medications at the same time.

The dosage depends on the curcumin content and the preparation. It is recommended to start with the lowest possible dosage. In dogs, 50 to 250 mg of curcumin per kilogram of body weight per day divided into three doses can be given, in horses about 1200 to 1400 mg of curcumin per kilogram of body weight. If turmeric is given as a crude drug, a dog should be given 50-600 mg/kg/day and a horse about 5-10 mg/kg/day. Horses require a lower dosage as they are much more sensitive to certain medicinal plants. As a raw drug, curcumin



Frankincense



Meadowsweet

example, with high-quality fish oil, with which valuable omega3 fatty acids can be supplied at the same time. For horses, the raw drug can be combined with rapeseed or linseed oil.

Frankincense

Frankincense, also known as olibanum or boswellia, belongs to the balsam family. It is the resin of the salai tree, native to India, Africa and the Arabian Peninsula. The lighter the resin, the higher the quality of the frankincense, which depends on the time of harvest. For healing purposes, mainly frankincense from India or Africa is used. The Indian name "Boswellia serrata" suggests that elephants eat frankincense as a forage plant and thus as part of their natural diet, suggesting that animals are so intelligent that they actively seek out forage plants with a healing effect. The therapeutic effect of frankincense is based on the action of essential oils, the main active ingredient is boswellic acid. It has anti-inflammatory, antiviral, anti-arthritis, analgesic and immunomodulatory effects. The effect of frankincense is comparable to that of cortisone, but without its unfavorable side effects. Frankincense inhibits the growth of enzymes that cause inflammation and can dissolve cartilage tissue. The administration of frankincense

can reduce joint inflammation and positively affect both acute arthritis and chronic osteoarthritis in humans and animals. Frankincense relieves pain and improves joint function. It can be used alone or in combination, for example with curcuma. Good results can be achieved especially in elderly patients with chronic joint complaints, such as osteoarthritis, which worsens when the weather changes, but also in autoimmune-related diseases, such as immune-modulated polyarthritis in dogs, which normally must be treated with cortisone or chemotherapy. In this case, conventional medication can be reduced somewhat and treated with frankincense as a supplement. Side effects may include stomach sensitivity or allergic skin reactions. The dosage depends on the content of boswellic acid. In dogs, one would administer 25-500 mg per kilogram of body weight, divided into three doses a day; in horses, about 3200 to 4000 mg a day.

Meadowsweet

Meadowsweet contains salicin. Salicin is a naturally occurring prodrug, i.e. the precursor of an active ingredient that must first be converted in the body to the actual active ingredient, active salicylic acid. Salicylic acid is also the active ingredient in aspirin. Unlike aspirin, however, the salicylic acid in meadowsweet does not cause side effects, such as stomach upset. Meadowsweet belongs to the rose family (Rosaceae). It grows in northern and southern Europe as well as in North America and northern Asia. The dried herb and the flowers are used. The herb (*Spiraea ulmaria*) has given its name to aspirin.

Meadowsweet contains flavonoids, tannins, various salicylates and mucilages. It has antioxidant effects, prevents muscle soreness, is immunomodulatory, i.e. balancing, especially with bacteria, also blood thinning and possibly nerve and stomach protecting. Meadowsweet can be used alone or in combination for gastrointestinal disorders, rheumatism, in pediatric medicine, and for mild to moderate pain in muscles such as the back. Meadowsweet is also effective for hardened or tense muscles, for example in sport horses or dogs used in sports. Here meadowsweet can relieve tension in the muscles after short-term high stress. In dogs, 25 to 300 mg per kilogram of body weight is given per day, divided into three

portions. In horses, one should start with 10 g per day and increase the dose to 20 to 50 g if necessary.

Willow

The willow (lat. *Salix*) belongs to the willow family and grows on moist sites in Europe, North Africa and Asia. The inner bark is used medicinally. Willow bark is probably one of the most commonly used herbs for horses in Germany. Willow also contains salicin, depending on the type of willow, the salicin content is between 0.5 and up to 11%, as well as up to 20% tannins. Willow bark has anti-inflammatory, anti-rheumatic, antiseptic, antipyretic, analgesic and astringent effects. Also, the salicylate in willow is a prodrug that is first converted to the active form of salicylic acid in the body and therefore has little or no side effects. Willow bark has little or no negative effects on the stomach lining and there is little risk of gastrointestinal bleeding.

It can be used alone or in combination with meadowsweet, nettle, dandelion root, or ginkgo for lower back pain such as lumbar spine. Willow bark can be used in horses for osteoarthritis of the spine and hock, lameness, and pain unrelated to weather in low doses for long-term support. This can reduce inflammation, improve blood flow to the tissues, and thereby reduce swelling. In low doses, willow bark can also be given as a longer-term support for fever without a real cause. A therapeutic effect sets in after about one to four weeks. Willow bark is therefore not suitable for acute treatment. In dogs, the dosage of the raw drug is 25 to 500 mg per kilogram of body weight, divided into three doses daily; in horses, 30 to 55 g per 500 kilograms of body weight per day. Side effects can also be here, as with meadowsweet, for example, salicylate hypersensitivity. Care should also be taken with pre-existing gastrointestinal ulcers. Willow bark should not be used in dogs and mares at the end of pregnancy, as salicylic acid can pass into the milk.

Conclusion: Numerous herbs with different modes of action and pharmacological foci are available for orthopedic treatment, so that one can respond individually to the needs of individual patients. 🐾

For more information
www.kraeuter-mix.de

Willow