

## ETIOLOGY, PREVENTION AND TREATMENT OF RHEUMATIC INFLAMMATION HOOF IN HORSES

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### ABSTRACT

*This article provides information on the basis of an analysis of the literature on rheumatic inflammation of camels, their etiology, diagnosis and treatment, prevention measures, among sport and working horses. This article presents data based on an analysis of the literature on the adverse effects of breast tumors on the activity of the dog immune system and measures to eliminate it, which are common among dogs today.*

**KEYWORDS:** *Horses, Rheumatic Diseases Of The Hoof, Clinical Signs, Acute Diffuse Pododermatitis, Complex Treatment, Prophylaxis.*

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### INTRODUCTION

Resolution of the President of the Republic of Uzbekistan "On additional measures for the development of horse breeding and equestrian sports in the Republic of Uzbekistan" No. PP-3057 dated June 15, 2017, "On additional measures for further development of horse breeding and equestrian sports and popularization of modern management and polo" 2021 Resolutions No. PQ-5024 of March 11, 2019, Resolution of the Cabinet of Ministers "On measures for the integrated development of horse breeding and equestrian sports in 2017-2021" No. 517 of July 17, 2019 Improving veterinary services for horses , requires a new modern approach to protecting horses from various diseases.

In recent years, in most countries of the world, the main part of non-communicable diseases among animals is surgical pathology, including the proportion of animals that are excluded prematurely due to foot diseases is 4.0-15.3% [1,5]. Therefore, taking into account the regional conditions of the country, the incidence of rheumatic diseases of horses' hooves, analysis of morphological and biochemical changes in the body of infected animals, early diagnosis, identification of etiopathogenesis, development and improvement of effective methods and means of treatment and prevention. The research is topical.

**Analysis of the obtained results.** Rheumatic inflammation of the hooves (pododermatitis reumatica) is a diffuse, mainly aseptic inflammation of the suckers and vascular layers of the base of the hoof skin in the anterior half of the hoof [1,3,5]. The disease can be acute and chronic and is accompanied by displacement of the hoof bone and deformation of the hoof horn capsule. The disease usually affects both forelegs of horses, sometimes four, and rarely one foot [4].

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Diseases such as rheumatic inflammation of the hoof in horses are very common and occur as primary and secondary disease. In many cases, this disease develops and leads to negative consequences or serves as a basis for the occurrence of very serious complications. Therefore, timely prevention and treatment of this disease is very important [2,6].

At the onset of the disease, abrupt changes in external temperature and feeding regime during the seasons, metabolic processes that contribute to the onset of diffuse aseptic pododermatitis in horses during puberty, most often occur in horses 4-10 years, including 4-6 years of mares and 7-9 years of stallions. factors such as deformity of the legs and hooves as a result of excessive weight gain of horses, the presence of defects in the structure of the hooves and changes in the shape of the hoof, the result of mistakes in cutting and care of the hooves play an important role. However, the main etiological factor in the origin of the disease is a violation of the acid-base balance in the body of horses, cardiovascular, renal and endocrine pathologies that lead to blood clotting. These pathologies occur mainly under the influence of chemical-toxicological and mechanical-traumatic factors. Chemical and toxicological changes are mainly due to feeding horses with foods rich in difficult-to-digest proteins and carbohydrates, an unbalanced diet, malnutrition, and the feeding of uncooked cereals. The sensitization of the body and the effect of histamine play an important role in the development of this inflammatory process [8,9]. Irrigation of horses with contaminated and cold water, feeding tired and sweaty horses immediately after exercise with whole grains, unripe alfalfa, rotten and moldy foods also lead to rheumatic inflammation of the hooves as a complication of colic. Excessive use of horses under the influence of mechanical and traumatic factors leads to hyperemia of the blood vessels and capillaries of the hoof, resulting in increased vascular permeability and an increase in internal pressure from the infiltration of serum into the hoof. This leads to the onset of the disease [7].

The origin of the disease is also due to the fact that horses suffer from infectious diseases (influenza, contagious pleuropneumonia, diarrhea, mango, etc.), which are accompanied by an increase in body temperature, complications of the difficult birth process [10].

Clinical signs of the disease. In the acute course of the disease for the first 12-36 hours there is an increase in body temperature to 40 ° C, rapid breathing, impaired heart function, muscle tremors, hyperemia of the mucous membranes, and then a decrease in body temperature.



A)



B)

*Figure 1. The position of the horse's legs in the acute course of the disease.*

*A) when the front legs are sick, B) when the hind legs are sick*

The main clinical sign is a basic lameness, if both forelegs are diseased, the patient puts the forelegs forward and the hind legs under the body (Fig. 1). If both hind legs are diseased, the forelegs are also placed under the chest and the horse's head is bent downwards.

This paralysis is under the influence of intense pain in the hooves, and if the hooves are pressed with special test clamps, the pain can be seen to increase further. This is accompanied by an increase in local temperature in the hooves and an increase in pulsation.

Acute course of the disease, if favorable conditions are created and fully cured, the horse will recover in 8-10 days. If the disease is not treated in time, the disease becomes chronic. This causes morphofunctional changes in the hoof (Figure 2)



*Figure 2. Hoof deformity in chronic course of the disease*

Diagnosis. Diagnosis of the disease is based on clinical signs.

Treatment. Once the diagnosis is based on the acute course of the disease, the animal is transferred to a thick and soft bed, initially placed in a cold bandage on the hooves, or kept in running water for 12 hours. To prevent intoxication, blood is drawn to reduce the concentration of toxins in the blood (up to 8-9 l in large horses). Antihistamines - diphenhydramine 0.3-0.4 g subcutaneously, intravenous 0.25% Novocain in the amount of 1 ml / kg. The animal is restricted in movement and kept in a quiet place. Calcium gluconate, sodium bicarbonate, diuretics Lasex, urotropin, furosemideis also injected. Gyrocortisone, the hormones dexamethasone and phenylbutazone also work well. Feed and coarse hay are excluded from the horses' rations. Water supply is limited. To maintain the balance of sodium and potassium in the body, the diet is given potassium chloride in the amount of 30 g per day. To strengthen the hoof wall, methionine, biotin and zinc are added to the diet on a regular basis.

In order to prevent the disease, it is necessary to eliminate the above factors in a timely manner.

## **CONCLUSION**

1. Rheumatic inflammation of the hooves is a common disease among horses, leading to their early demise, loss of ability to work, and economic damage to farms.
2. The origin of the disease can be caused by violation of the requirements for storage and feeding of animals, improper exploitation and the consequences of various diseases.

3. Timely detection and treatment of the disease in the acute form of the disease can lead to recovery in 8-10 days, otherwise the disease will develop into a chronic form, causing morphofunctional changes in the hooves.

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