

**TOE AND HOOF DISEASES IN BREEDED CATTLE, ITS ETIOPATHOGENESIS  
AND CLINICAL SYMPTOMS**

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**Abstract**

Finger and hoof diseases of high productivity cattle brought to our country from foreign countries, its etiopathogenesis and clinical symptoms are discussed.

**Keywords:** Foot diseases, general and special examination methods, pododermatitis, hoofs, dermatitis, heel, purulent-necrotic wound, gout phlegmon, round joint, arthritis, soft heel phlegmon.

Many highly productive breeds of cattle were brought to our country from foreign countries and distributed to farms with limited liability. It should be noted that in order to keep imported domesticated livestock healthy and obtain quality and ecologically clean products from them, there should be dezobarriers at the entrances to livestock farms and pastures suitable for our region and zoohygienic requirements.

Holstein-Friesian cattle make up a large number of heifers with high productivity imported from foreign countries. In almost all regions of our country, complexes have been built for them to feed them without special ties. These cows have high milk productivity and increase

milk production. Diseases of the distal part of the feet are a serious problem in most farmers and farms with limited liability. Therefore, finding the etiopathogenesis, clinical symptoms, treatment and preventive measures of this pathology is one of the urgent problems.

According to foreign literature, in the next 30 years, diseases of the distal part of the legs will be one of the main problems in cows with high productivity, and as a result, 50% of infected cows are slaughtered prematurely, and this causes great economic damage to farms.

Hoof damage accounts for 50-60% of all foot diseases or 14-17% of surgical pathology in productive animals (1). In the following years, 4-15.3% of cows are prematurely culled due to leg diseases (2). In Russia and other foreign countries, there is a significant increase in foot diseases in large horned animals (3). In Sweden and England, 74% and 55% of animals are slaughtered due to foot diseases (4) (5). Some authors (Veremey E.I., Jurba V.A., 2003) state that foot diseases are one of the main reasons for the deregistration of animals in some European countries. Foot diseases are the third most common disease in the Netherlands, after mastitis and infertility. The introduction of advanced technology in Irish livestock has led to an increase in lameness (54%) among animals. In Sweden, 4%, 3% in Germany and 2% in the Netherlands of cows producing more milk are lost due to lameness. In the next 10-15 years, hoof injuries increased by 20-50% despite the decrease in the number of cows in farms and complexes (South Ural, Chelyabinsk, Kurgan regions of Russia, Kustanai region of Kazakhstan) (7).

I.S. Panko, V.A. According to Lukyanov (2003), one out of every three cows is lost due to hoof deformity or lameness. As a result of hoof deformity and its disease, milk production decreases by 3.3-4.5 kg per day, and the general condition of animals deteriorates (8).

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As a result of investigations, the main exogenous factor causing finger and hoof diseases in cows is injury to the horn capsule (floor) and soft tissue as a result of various types of mechanical damage, which then causes the entry of pathogenic microflora into the wound and the development of the pathological process. This is due to the compression of animals, floor construction, violation of sanitary and hygienic standards, lack of composition of the diet based on the components necessary for the life of the organism, and as a result, the resistance of the organism to infection has decreased and the disease has arisen. When the blood of infected animals was examined, it was found that the amount of protein, phosphorus and calcium in their blood was significantly reduced, and as a result, the animals' resistance to various diseases decreased, which was caused by an increase in skin permeability and a thinning of the epidermal layer.

In addition, inspections have shown that concrete floors in newly built livestock complexes are acidified in the first year due to moisture, which softens and erodes the horn part of the hoof, as a result of which there are many hoof diseases among animals kept in such barns in the first year. Therefore, when disinfecting floors, liquids with an acidic environment should be used. The floor of farm complexes is made of large stone sand or gravel, gradually the cement is washed away and the floor becomes hard and uneven, as a result the hoof cornea is eroded and the weight does not fall evenly on the heel of the hoof. and inflammatory processes develop.

It was noted that the process of adaptation to the conditions of our region in animals brought from abroad also causes various finger and hoof diseases to occur in their body. As a result, during the transportation of animals, deformations appeared on the heels of their hooves, microorganisms in new conditions caused the acceleration of pathological processes in them. Especially among heifers, lameness appeared 2-3 weeks after calving, and this symptom gradually increased among animals. This is due to the fact that cows excrete a large amount of macro and micronutrients through milk, and secondly, the process of adaptation of animals is ongoing.

The disease is chronic, most of the heifers become lame 2-3 weeks after calving, and then veterinarians observe that after 8-11 days the lameness subsides in some animals and the animal seems to recover, while in others the lameness worsens. recorded. The general condition of the cow is satisfactory, but the amount of milk has decreased. The animal feeds along with the general herd. When a cow has lameness of the 2nd-3rd degree, its general condition worsens, it becomes weak and begins to lose weight. The general temperature rises by 0.5-10C.

When examining the hooves of sick cows, it was noted that the cornea softened, especially in the hind leg, the cornea of the hoof heel was destroyed, and the damaged cornea turned dark

and rotted, and in some animals, the pathological process reached the base of the skin of the heel. When the hooves of cows with lameness were cleaned, it was found that the pathological process had reached the base of the heel of the hoof and purulent pododermatitis had developed.

In some cows, when we removed the deformed cornea of the hoof heel, it was noted that there was a channel leading to the hoof joint, and there was a gray cloudy odorless liquid in it, and an inflammatory process with obvious clinical signs was noted.

### Conclusions

1. The process of adaptation of imported cows to the conditions of our region, high humidity in the complex, lack of grazing grounds, conditions not up to the required level, lack of macro- and microelements in the diet, and not cutting the hooves on time cause various hoof diseases
2. When examining the hooves of sick cows, the softening of the cornea was especially evident in the hind leg, and 84% of infected animals had damage to the hind legs, and 16% to the front legs.

### List of used literature

1. Бурденюк, А.Ф. Ветеринарная ортопедия (Текст) / А.Ф.Бурденюк, Г.С.Кузнецов. – Л., «Колос», 1976.-200с.
2. Улимбашев М. Б. резистентность к болезням конечностей и биофизическая характеристика копытцевого рога коров (Текст) / Ветеринария, 2007. -№ 9. – С. 44.
3. Дистл, Коорн Д. С., Мс Даниел Б. эт ал. // Ливерст. Прод. Сси. 1990. - № 25.
4. Политиек Р.Д, Дистл О., Фжелдаас Т. эт ал. // Ливерст. Прод. Сси. 1990. - № 25.
5. Бовей Р. Саттле ламенесс анд хоофсаре. – Ипвич, 1993.
6. Веремей Э. И. Этиопатогенез и современные подходы к лечению гнойно-некротических протсесов в области копытес и палсев у КРС (Текст)/Э.И.Веремей, В.А.Журба, В.А. Лапина // Ветеринарный консультант, 2003. -№ 16. – С.10-11.
7. Молоканов В.А. прогнозирование и профилактика болезней копытес у коров (Текст) / В.А.Молоканов, В,М,Щеглов, М.Т.Байкенов // Ветеринария, 2001. -№7.-С.38-40
8. Панко И.С. деформатсия копытес у высокопродуктивных коров (Текст) /
9. И.С.Панко, В. А. Лукъяновский с соавт. // Ветеринарных консультант, 2003. №2-10
- 10.Магда И.И. Заболевание дистального отдела конечностей у крупного рогатого скота: Обзор иностранной литературы (Текст) / И.И. Магда, Н.С.
- 11.Островский // Ветеринария. – 1974. -№ 12. – С.108 Островский // Ветеринария. – 1974. -№ 12. – С.108-109.