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THEIR CLINICAL SIGNS IN IMPROVED TREATMENT OF INTERDIGAL DERMATITIS PROCESSES IN CATTLE

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ABSTRACT

In this article, according to the severity of interdigital dermatitis, stage M1 is small foci (less than 2 cm) with a surface covered with a red or white-red tint, stage M2 is a "classic wound", red or white-red in diameter more than 2 cm, granulation tissue is observed on the surface of the pathological process, at the stage of MOH - healing wounds with a black scab surface, and in the M4 stage - dyskeratosis or proliferation process is observed, in the treatment of interdigital dermatitis in cows, an aqueous solution of 1:3 ochitka is used in a ratio of 10 ml of aloe extract + 5 ml of lidocaine hydrochloride with a special swab moistened with special antibiotics (levamycin 4 tab, rifampicin 2 capsules, streptocide 4 tab) has an anti-purulent necrotic and inflammatory effect It has been established that they have a positive effect on regenerative processes and stimulate them, reduce the recovery of sick animals by an average of 5-6 days, and experimental results of their use in the treatment of purulent necrotic processes are described.

Keywords: inflammation, pus-necrotic, shakhtersky vein (chistotel) (chelidoii herba), aloe extract, special antibiotic levamycin, rifampicin and streptocid, lidocaine hydrochloride, hyperemia, blood, local temperature.

INTRODUCTION

Relevance of the topic. Interdigital dermatitis, also known as "Mortellaro's ulcer", is an inflammatory lesion of the plantar surface of the interhoof skin in cattle. This disease was first described and studied in 1974 by Cheli i Mortellaro. Later, this disease was examined in more detail and, depending on the region, it is called finger dermatitis, infectious papillomatosis, "foot-rot", papillomatous finger dermatitis, and watery dermatitis [1;3].

Among the pathologies, finger and interdigital dermatitis (Mortellaro's disease), laminitis and lesions associated with laminitis are the most common: heel ulcer, ulcer and abscess of the white line, bleeding from the heel and white line, bird's foot and crack in the white line.; soft heel corneal erosion, interdigital phlegmon (hoof rot, interdigital necrobacteriosis). The nomenclature of the most common hoof diseases in Russian and foreign literature is approximately the same [5].

Cattle finger dermatitis consists of stages from the appearance of small ulcers to hyper and dyskeratic growth of the basal layer of the skin. Outwardly, the lesions resemble strawberries, so the disease is sometimes called "strawberry rot".

Pathological processes are located on the palmar or plantar surface of the fingers and hooves, between the fingers, along the perimeter of the hoof circumference, under the rudimentary fingers and above the horn capsule [4]. The rapid spread of the disease, pain and lameness lead to reduced productivity of animals and economic losses. Barmock dermatitis is difficult to treat, because the pathogen penetrates deep into the tissues, which aggravates the damage and complicates the treatment [6].

Individual and group methods are used for the treatment of barmock dermatitis, and local treatment, especially the use of agents containing antibiotics, is the most common treatment [7]. Toholj V. e. a. stated that local treatment is more effective when the affected tissue is surgically removed [8]. A number of different substances are used for local therapy. Good treatment results can be obtained by using aerosols containing tetracycline (chlorine or oxytetracycline) [2,9]. When treated with this method, a decrease in the level of lameness is observed after 6 - 12 hours. After 2-3 days of treatment, the animals move without difficulty [9].

The purpose of the study. Development and clinical indicators of improved treatment methods based on the use of bloodworm (chistotel), aloe extract and special antibiotics (levomycetin, rifampicin and streptocide) based on a certain amount and order in the treatment of cows with interdigital dermatitis "Mortellaro's disease" in dairy farms is to study its changes.

Place, object and methods of research. For the experiments, 20 Holstein cows with a body weight of 550-650 kg and an age of 3 to 4 years were selected from the cattle farm "QUNIRATBAY MEXRI" of the Nukus district of the Republic of Karakalpakstan, which were undergoing clinical orthopedic examinations and were undergoing processes of interdigital dermatitis. Based on the principle of similar pairs, 3 experimental and 1 control groups of 5 animals each were formed. Feeding and storage conditions did not differ from each other.

In the first experimental group, the toes and hooves of the animals were cleaned and clipped, and the pus and dead tissue in the pathological area were surgically removed, then washed with 3% hydrogen peroxide, and 5 ml of a 1:3 water solution of chelidoii herba and a combination of special antibiotics (levomycetin 4 tabs, rifampicin 2 capsules, streptocide 4 tabs) and aloe extract 10 ml + 2% lidocaine hydrochloride 5 ml soaked special tampons were applied and tightly bandaged.

The animals of the second experimental group had their toes and hooves cleaned and clipped, and the pus and dead tissue in the pathological area were surgically removed, then washed with 3% hydrogen peroxide, and a 1:3 solution of bloodwort (Chistotel) (Chelidoii herba) in water and special antibiotics. (levomycetin 4 tabs, rifampicin 2 capsules, streptocide 4 tabs) combination was applied and bandaged.

The animals of the third experimental group had their toes and hooves cleaned and clipped, and pus and dead tissue in the pathological focus were surgically removed, then washed with 3% hydrogen peroxide, and a 1:3 aqueous solution of bloodwort (Chelidoii herba) and aloe

extract. Special tampons soaked in 10 ml + 2% lidocaine hydrochloride 5 ml were applied and bandaged.

The animals of the fourth control group had their toes and hooves cleaned and clipped, and pus and dead tissue in the pathological area were surgically removed, then washed with 3% hydrogen peroxide and levamicol ointment 10 g. and streptocide 4 gr. Kuki was mixed and applied and tied tightly.

The study of the characteristics of the clinical signs of interdigital dermatitis in experiments was carried out directly in farm conditions and the assessment of the intensity of damage in the disease Dopfer D. e. a., 1994 according to the classification proposed by [47].

Analysis of the obtained results. In the first experimental group, M1-initial process of the disease in the rear left leg of 1 head animal, M2-"classic ulcer" of the disease in the rear right leg of 1 head animal, acute stage with active ulcer, M3 of interdigital dermatitis in the rear right leg of 1 head animal and in the front right leg of 1 head animal. - stage of growing lesions with a black scab surface and 1 head left rear of the animal it was found that the stage of the disease is M4-dyskeratosis or chronic proliferation process.

In the first experimental group, on the 4th day of treatment, in 1 animal with M1-initial process of the disease on the rear left leg, the shapeless swelling on the inter-hoof skin above the soft heel decreased slightly, the inter-hoof skin was slightly swollen in yellow, the hoof area was slightly reddened, and the folds of the inter-toe skin above the soft heel were slightly reddened. reduced swelling and local temperature and when walking it was determined that no lameness was observed. In this group, 1 animal undergoing the acute stage of M2-"classic wound" of interdigital dermatitis on the hind leg of this group with an active wound, limping decreased when walking, and when standing, it raised the injured leg and rested on the tip of the hoof. on the skin of the heel, which goes to the corn layer, and it was found that it occurs on the skin of the hooves. In animals with stage M3-black crusted surface of interdigital dermatitis on one hind leg and one front leg, the lesion was dark yellowish in color on the pathological plane, and the hairy watery wound was smoothed without swelling. It was characteristic that the skin between the fingers, the line of the hoof circle, and the wounds on the front and back edges of the interdigital fissure turned dark and yellowish. Similarly, in the rear left leg of 1 head animal in this group, in the M4-dyskeratosis or chronic proliferation stage of the disease, proliferative processes were observed in the form of thread and scab, and pathological lesions were manifested in the form of bridging inter-hoof hyperplasia in the interdigital crack in the area of the hoof heel. Its surface was characterized by a dry, proliferative ulcer, and a dark yellowish color.

Animals frequently switched their injured legs while standing, and mild lameness was not noted when moving. On the 8th day of treatment, it was observed that the pathological process was covered with young granulation tissue, swelling and local temperature and redness in the non-pigmented area of the skin were observed in animals with M1, M3 and M4 stages of interdigital dermatitis.

On the 10th day of the experiment, in an animal with M2 stage of interdigital dermatitis, it was noted that healthy young granulation tissue grows in the wound in the pathological third, proliferative processes decrease, hyperplasia in the interdigital fissure decreases, swelling

between the fingers decreases, elasticity is restored, skin folds are reduced, and passive movement in the injured fingers is noted. finger movement was found to be free and less painful when used.

From the 12th day of treatment, the animals with M1, M3 and M4 stages of interdigital dermatitis did not have swelling and local temperature and redness in the non-pigmented area of the toes, the wound was filled with granulation tissue, a scar was formed in the wound and covered with young skin epithelia, and the defects in the toes were restored to the normal level. was determined.

On the 15th day of the experiment, in the animal with M2 stage of interdigital dermatitis, proliferative processes, hyperplasia in the interdigital fissure, and interdigital swelling were not observed, the wound was filled with granulation tissue, a scar was formed in the wound and covered with young skin epithelia, and the defects in the fingers were restored to normal levels.

In the second experimental group, 1 animal in the rear right leg had M1-initial stage of the disease, 1 animal in the rear left leg had M2-"classic ulcer", acute stage with an active ulcer, 1 animal in the rear left leg had M3-healing lesions of interdigital dermatitis with a black crusty surface. stage and M4-dyskeratosis of the disease in the rear right leg of 1 head animal or it was determined that the stage of the chronic proliferation process is taking place.

In the second experimental group, on the 4th day of treatment, in 1 head animal with M1-initial process of the disease in the hind leg, when examining the damaged areas of the skin between the fingers, a round shapeless tumor was observed adhering to the hairs with a size of 1.0 cm. in the form of a raised spot of red-yellow color observed. The damaged area of the skin is slightly reddened, the pain has decreased, and in some animals, it has been detected that a few blood clots have accumulated in some areas of the damaged pathological plane. In this group, in 1 animal undergoing the acute stage of interdigital dermatitis M2-"classic ulcer", active ulcer, the damaged area of the interdigital skins was observed. shapeless ulcer 2.5-5 cm in size necrotic pathological processes were detected, the pathological processes are mainly the skin of the soft heel, which passes into the soft horn layer, is slightly reddened and feels pain, blood clots have formed in some places of the wound, the limp has decreased when walking, and when standing, he lifts his injured leg and leans on the tip of the hoof, the damaged area of the skin is dark and oval in shape necrotic pathological processes were detected. In the animals undergoing the process of the stage of growing lesions of M3- black crusted surface of interdigital dermatitis on one hind left leg, in the infected cow, the areas with significant erosion of the upper border of the hemispherical heel horn parts turned into cora kutri, and as a result of changes in the placement of the hoof, the hoof was significantly deformed, in the pathological third a little swollen and hairy watery wound turns dark yellow, slightly reddened and painful. Similarly, in the rear right leg of the 1 head animal of this group, in the M4-dyskeratosis or chronic proliferation stage of the disease, pathological lesions were manifested in the form of slight hyperplasia in the interdigital crack in the hoof heel area and on the upper side of the hoof, as well as in the interdigital crack space and the bridge of the hoof. it was determined that the surface of the pathological planes in the area of the damaged hoof of the animal had a dry, dry wound with proliferation, and the wound, reminiscent of the surface of a strawberry without an ogre, had turned dark and yellowish in color. When the cow was

standing, the frequency of changing the injured leg was reduced, and there was no lameness when moving. On the 10th day of treatment, in the cows with M1, M3 and M4 stages of interdigital dermatitis, it was clearly seen that young granulation tissue was growing in the pathological area, swelling and local temperature in the pathological area, and redness in the non-pigmented area of the skin remained a little.

On the 12th day of the experiment, in an animal undergoing M2 stage of interdigital dermatitis, healthy young granulation tissue grows in the wound in the pathological finger, proliferative processes decrease, hyperplasia in the interdigital fissure is not noted, swelling and lameness in the pathological finger decreases, skin elasticity is restored, and pain is significantly reduced when passive movement is applied to the injured fingers. was determined.

From the 14th day of treatment, the animals with M1, M3, and M4 stages of interdigital dermatitis did not have swelling and local temperature and redness in the pathological area, the injured area was filled with granulation tissue, and a scar was formed in the wound and covered with young skin epithelia. and heel defects were found to have recovered to normal levels.

By the 17th day of treatment, in the animal with M2 stage of interdigital dermatitis, proliferative processes and hyperplasia in the interdigital fissure were not observed, the wound was filled with granulation tissue, a scar was formed in the wound and covered with young skin epithelia, and the defects in the finger were restored to the normal level.

In the third experimental group, M1-initial process of the disease in the rear left leg of 1 head of animal, M2-"classic ulcer", acute stage of the disease with active ulcer in the rear right leg of 1 head of animal and front right leg of 1 head of animal, M3 of interdigital dermatitis in the rear left leg of 1 head of animal - it was found that the stage of the disease is M4-dyskeratosis or chronic proliferation stage of the disease in the stage of growing lesions with a black scab surface and in the back left leg of 1 head animal and the back right leg of 1 head animal.

In the third experimental group, on the 4th-6th day of treatment, in one animal with M1-initial process of the disease, on the hind leg, when examining the surface of the damaged skin, a round shapeless swelling was observed with 0.8 cm hairs attached to it, pathological processes are soft heel pit, heel part of the hoof wall and on the border of the soft heel, it was found that it met on the skin, and the skin was identified as a yellow spot. The damaged area of the skin is red, there is pain, and a small amount of pus was detected in some parts of the damaged pathological plane in the animal. In the rear right leg of 1 head of animal and the front right leg of 1 head of this group, M2-"classic wound" of interdigital dermatitis, in animals undergoing the process of acute stage with active wound, was damaged. When examining the pathological processes in the skin between the hoofs, necrotic pathological processes with a shapeless ulcer 2-6 cm in size were revealed, the wound was detected in the soft heel pit, the heel part of the hoof wall and the border of the soft heel, on the skin, in the heel part of the hoof circle. Sick cows limp slightly when moving, cannot rest on the diseased leg when standing still, lean on the front part of the hoof, and when moving, gently press the leg carefully.

In a cow with M3-black crusted surface of interdigital dermatitis on one rear left leg, the upper border of the hemispherical hoof is markedly necrotic, and the hoof is significantly deformed as a result of changes in the pathological plane. turns yellowish, slightly reddened and does

not feel pain. Similarly, in the back leg of the 1 head animal in this group, in the M4 dyskeratosis or chronic proliferation stage of the disease, there is an interdigital crack in the hoof heel area and on the upper side of the hoof, the surface of the pathological planes in the damaged hoof area of the animal has a small dry ulcer with proliferation, a wound reminiscent of the surface of a strawberry without ogre. It was determined that the black hair turned yellowish. On the 10-12th day of treatment, it was clearly seen that young granulation tissue was growing in the pathological area in the cows with M1, M3 and M4 stages of interdigital dermatitis, swelling and local temperature in the pathological area and redness in the non-pigmented area of the skin remained a little.

On the 12-14th day of the experiment, in an animal undergoing M2 stage of interdigital dermatitis, healthy young granulation tissue grows in the wound in the pathological finger, proliferative processes decrease, hyperplasia is not noted in the interdigital fissure, swelling and flaking decreases in the pathological finger, skin elasticity is restored, the pain is greater when passive movement is applied to the injured fingers. was found to be reduced.

From the 15th day of treatment, there was no swelling and local temperature and redness around the pathological spot in the animals with M1, M3 and M4 stages of interdigital dermatitis from the 15th day of treatment, the injured area was filled with granulation tissue, and a scar was formed in the wound and covered with young skin epithelia. and heel defects were found to have recovered to normal levels.

By the 19th day of treatment, in the animal with M2 stage of interdigital dermatitis, proliferative processes and hyperplasia in the interdigital fissure were not observed, the wound was filled with granulation tissue, a scar was formed in the wound and covered with young skin epithelia, and the defects in the finger were restored to the normal level.

In the fourth control group, M1-initial stage of the disease in the front left leg of 1 head of animal, M2-"classic ulcer", acute stage of the disease with active ulceration in the rear left leg of 1 head of animal and rear right leg of 1 head of animal, M3 of interdigital dermatitis in the rear right leg of 1 head of animal - it was found that the stage of growing wounds with a black scab surface and the stage of the disease M4- dyskeratosis or chronic proliferation process is passing in the rear right leg of 1 head animal.

In the fourth experimental group, on the 6-7th day of treatment, in one animal with M1-initial process of the disease, a 1-1.5 cm shapeless wound was observed on the skin of the heel of the hoof on the back leg of the 6-7th day of treatment, and the skin in the pathological process was identified as a red-yellow spot. The reddening and pain in the damaged area of the skin decreased a little, and in some places of the pathological plane, it was shown that the mine has grown. On the rear left leg of 1 head of this group and on the rear right leg of 1 head of the animal, necrotic pathological processes with shapeless wounds 2.5-5 cm in size were detected in the affected area of animals undergoing the process of M2-"classic wound" of interdigital dermatitis, acute stage with active wound, lameness when the animals walk. reduced, and when standing, he raises his injured legs and rests on the tip of the hoof. In the animals undergoing the stage of M3- black crusted surface of interdigital dermatitis on one head or calf, the pathological wounds in the cow have turned into a black scab, and in the pathological leg, a small swelling and watery wound has turned into a dark yellowish color, a little reddened, and the animal feels pain and limps when walking. Similarly, in the rear right leg

of 1 head animal in this group, it was detected that the pathological planes were located in the space between the fingers in the M4 dyskeratosis or chronic proliferation stage of the disease. When the cow is at rest, it frequently alternates the injured leg with the healthy one, and lameness has been observed when moving. On the 10-12th day of treatment, it was clearly seen that young granulation tissue was growing in the pathological area in cows with M1, M3 and M4 stages of interdigital dermatitis, swelling and local temperature and redness in the non-pigmented area of the skin remained a little.

On the 12-14th day of the experiment, in an animal undergoing the M2 stage of interdigital dermatitis, healthy young granulation tissue grows in the wound in the pathological finger, proliferative processes decrease, hyperplasia in the interdigital fissure is not noted, swelling and laxity in the pathological finger decrease, skin elasticity is restored, and pain when passive movement is applied to the injured fingers. was found to be much less.

From the 15th day of treatment, there was no swelling and local temperature and redness around the pathological spot in the animals with M1, M3 and M4 stages of interdigital dermatitis from the 15th day of treatment, the injured area was filled with granulation tissue, and a scar was formed in the wound and covered with young skin epithelia. and heel defects were found to have recovered to normal levels.

By 20-21 days of treatment, in the animal with M2 stage of interdigital dermatitis, proliferative processes and hyperplasia in the interdigital fissure were not observed, the wound was filled with granulation tissue, a scar was formed in the wound and covered with young skin epithelia, and the defects in the finger were restored to the normal level.

In conclusion, it is worth noting that the clinical signs of interdigital dermatitis showed clinical signs directly depending on the degree of the disease and the intensity of the damage, and the recovery time also differed sharply from each other, that is, the first group of animals undergoing the M1, M3, and M4 stages of interdigital dermatitis underwent 12 days of treatment, and the disease took 12 days. In animals with M2-"classic ulcer", the acute phase with active ulcer, treatment procedures were 15 days, in the second group, 14 days in the M1, M3 stage, and 14 days in the M4 stage, and in animals with the M2-"classic ulcer", acute stage of the disease. treatment procedures were 17 days. Similarly, in the third experimental group, the treatment procedures lasted 15 days in M1, M3 stage of interdigital dermatitis and 16 days in M4 stage, and 19 days in M2-"classic ulcer" acute stage of the disease, and in the fourth control group, treatment procedures in M1, M3 stage of interdigital dermatitis. 15 days and 16 days in the M4 stage, and 20-21 days in animals undergoing the M2-"classical ulcer" acute stage of the disease with an active ulcer. Complete recovery of the morphological and physiological functions of the toes and hooves of animals in all experimental and control groups was noted after the end of the treatment.

In the treatment, a 1:3 water solution of Chistotel (Chelidoii herba) and a combination of special antibiotics (levomycin, rifampicin and streptocide) and special tampons moistened with aloe extract + lidacaine hydrochloride resulted in faster wound closure in the groups that were used, and these preparations have antimicrobial and anti-inflammatory properties. may be a sign that It has been determined that the combination of Chistotel (Chelidoii herba), Levomycitin, Rifampicin and Streptocide and aloe extract + lidacain hydrochloride have an effect on the growth of a wide range of bacteria, including staphylococcus aureus, which is

often found in wounds. By reducing the bacterial load in the wound, the preparations of the combination of ginseng (chistotel) (Chelidoii herba), (levomycin, rifampicin and streptocide) and aloe extract + lidocaine hydrochloride create a favorable environment for tissue regeneration and prevent the prolongation of the inflammatory phase that interferes with wound healing.

SUMMARY

1. According to the level of injury intensity of interdigital dermatitis, M1 stage - the surface of small injuries (less than 2 cm) is covered with red or white-red, M2 stage - "classic wound", red or white-red diameter more than 2 cm, on the surface of the pathological process granulation tissue, MZ stage - healed wounds with a black scab surface, and M4 stage - dyskeratosis or proliferation process was observed.
2. In the treatment of interdigital dermatitis in cows, a 1:3 solution of mine wood in water, aloe extract 10 ml + 2% lidocaine hydrochloride 5 ml with a special tampon moistened with special antibiotics (levamycin 4 tabs, rifampicin 2 capsules, streptocide 4 tabs) to be used together with the wound, sick shortens the recovery of animals by 5-6 days.

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