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TREATMENT OF SUPPURATIVE INFLAMMATION OF THE FINGER JOINT IN SPORT HORSES

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Annotation
In sports horses with chronic suppurative synovitis and arthritis, the joint area is swollen, painful and hesitant. With a slight flexion of the injured joints of the legs of the animals, weakness, an increase in body temperature, an increase in the injured joint relative to the joint of the opposite leg are observed. In the treatment of purulent inflammation of the joints of the fingers, treatment with traditional methods lasted on average 20-25 days, while in the group using hydrocortisone, novocaine, chondrolone and Butasal-100, after the cessation of pus discharge, in addition to traditional methods, it was 15-18 days.

Keywords: Hydrocortisone, novocaine, chondrolone and Butasal-100, arthritis, purulent inflammation, acute purulent synovitis, chronic purulent synovitis and purulent arthritis, trauma, dislocations, etiology, pathogenic microorganisms.

Аннотация. Спорт отларида сурункали йирингли синовит ва артритларда бўғин соҳаси шишган, оғрикли бўлиши ва флюктуация кузатилиб, ҳайвонлар оёқларининг жароҳатланган бўғинларини бироз буккан ҳолатда, ҳолсизланиш, тана ҳароратининг кўтарилиши, жароҳатланган бўғиннинг қарама-қарши оёқ бўғинига нисбатан катталашиши кузатилиб, бармоқ буғимлари йирингли яллиғланишларини даволашда ананавий усуллар ёрдамида даволаш ўртача 20-25- кун давом этган бўлса, ананавий усулларга қўшимча йиринг ажралиши тўхтагандан кейин гидрокортизон, новокаин , хондролон, ва Бутасал-100 қўлланилган гуруҳда эса 15-18 кунни ташкил этди.

Калит сўзлар. Гидрокортизон, новокаин , хондролон, ва Бутасал-100, бўғим, йирингли яллиғланишлар, уткир йирингли синовит, сурункали йирингли синовит ва йирингли артрит, шикастланишлар, жарохатлар, этиология, патоген микроорганизмлар.

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Аннотация. У спортивных лошадей при хроническом гнойном синовите и артрите область сустава опухает, болезненна и колеблется. При незначительном сгибании травмированных суставов ног животных наблюдается слабость, повышение температуры тела, увеличение травмированного сустава относительно сустава противоположной ноги. При лечении гнойного воспаления суставов пальцев лечение традиционными методами длилось в среднем 20-25 дней, тогда как в группе с применением гидрокортизона, новокаина, хондролона и Бутасала-100 после прекращения выделения гноя в дополнение к традиционным методам было 15-18 дней.

Ключевые слова. Гидрокортизон, новокаин, хондролон и Бутасал-100, артрит, гнойное воспаление, острый гнойный синовит, хронический гнойный синовит и гнойный артрит, травмы, вывихи,, этиология, патогенные микроорганизмы.

Relevance of the topic. Prevention of infectious and parasitic diseases and treatment of non-infectious diseases in equestrian sports in accordance with the tasks set by the President of the Republic of Uzbekistan "On additional measures for the development of horse breeding and equestrian sports in the Republic of Uzbekistan" dated June 15, 2017 № PD-3057 and the development of effective methods prevention has been identified as a key challenge.

In recent years, in most countries of the world, the main part of non-infectious diseases among animals is surgical pathologies, including the share of animals written off prematurely due to foot diseases is 4.0-15.3% (4,9). The musculoskeletal system of animals, especially the distal part of the legs, is relevant for identifying causes without purulent and purulent-necrotic processes in the joints, early diagnosis, and the development of modern treatment and prevention measures.

Over the years of independence, the country has taken comprehensive measures to accelerate the development of the livestock industry. At the same time, good results are achieved in increasing the livestock and productivity of the livestock, as well as in identifying the causes of various non-infectious diseases of animals, early diagnosis, treatment and prevention (5,6,7,8). In this regard, it is especially important to further improve the early diagnosis, treatment and prevention of purulent inflammation of the joints of the distal part of the legs of animals.

As a result of injuries, purulent inflammatory processes of the joint are observed, characterized by severe pain, swelling, redness, increased local temperature and dysfunction, vascular hyperemia and increased permeability. Open wounds in the joints cause lysis of damaged soft tissue cells due to the fall, development and proliferation of pathogenic microorganisms, accumulation of purulent-serous exudate, excitation of nerve receptors in the surrounding vascular wall, which leads to cell swelling (1,2,3).

One of the urgent tasks of animal husbandry in the world today is the development of early diagnosis, treatment and prevention of purulent processes of the joints of the feet, which are often found in animals. Therefore, taking into account the regional conditions of the country, research aimed at developing and improving effective methods and means of early diagnosis, etiopathogenesis, treatment and prevention of purulent diseases of the distal joints of the legs in animals is relevant.

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Place, object and research methods. Scientific experiments on treatment were carried out in the clinic of the Samarkand Institute of Veterinary Medicine, the Department of Veterinary Surgery and Obstetrics of the Faculty of Veterinary Prevention and Treatment of Sick Animals that entered the farms of the Samarkand Region and in the laboratories of the Samarkand Regional Hospital.

A planned surgical dispensary was carried out on horses in order to study the factors that have regional characteristics that cause purulent diseases of the fingers. Scheduled dispensaries were held once or twice a year or once a quarter. Clinical examinations revealed the general condition of the animals, appetite, condition of mucous membranes, body temperature, pulse, respiration, joint condition, type of limbs and joint pain. For the treatment of toe inflammation in horses, horses with affected finger joints have been isolated and clinical trials have been conducted.

The experiments were performed on 10 horse heads delivered to the clinic and kept in farms with purulent diseases of the fingers. In the experimental horses, purulent disease of the fingers was diagnosed on the basis of anamnestic data, general and specific methods of investigation of diseases of the fingers. Storage and feeding conditions were leveled and divided into 2 groups of 5 animals. Horses with purulent diseases of the fingers were isolated, the localization and changes in the pathological process in them were investigated, and the effectiveness of various methods of their treatment was compared.

The animals of the first control group were checked by traditional methods, that is, they cleaned the hooves and surgically removed dead tissue in the pathological focus on the fingers, then washed with 5% potassium permanganate, 0.5% novocaine, 5 ml + gentamicin, 4 ml intramuscular injection and into the pathological focus rubbed Levamikol ointment.

In the second experimental group of animals under local anesthesia, dead tissue in the pathological focus on the fingers was removed surgically, followed by traditional methods: hydrocortisone 4 ml + novocaine 10 ml around the joint after the cessation of pus excretion, chondrolone 4 ml intra-articularly to reduce inflammation, immunostimulant Butasal- 100 was injected intravenously, 25 ml once every 48 hours, three times in total.

Analysis of the results obtained. Clinical manifestations by collecting anamnestic data and conducting clinical examinations, the types and nature of injuries to parts of the fingers in animals were determined, and it was also established that the animals were mainly infected with capsular phlegmon and purulent arthritis. In animals of the first group, capsular phlegmon of hooves and purulent arthritis were found in four animals, and in the second group - capsular phlegmon in four animals and purulent arthritis in six animals.

Purulent arthritis in the joint of the bed in four heads in the first group and two heads in the second group. One head of the first group and three heads of animals of the second group had chronic suppurative synovitis in the hoof joint, and the following clinical signs were also observed: swollen, painful and fluctuating joint area affected by purulent synovitis. The animal presses on the front of the leg, while the injured leg joints are slightly bent. Severe lameness occurs on movement. The animals show weakness, an average increase in body temperature of 1-2 ° C, an increase in the damaged joint

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relative to the joint of the opposite leg, loss of skin elasticity, an increase in the joint capsule, it is difficult to palpate the bulges of the joints, thickening of the handle, decreased elasticity, passive movement of the joints is limited and painful.

In animals with purulent arthritis, clinical signs were characterized by general weakness, an increase in body temperature, an increase in the contour of the joint, contraction of the diverticula of the joints, and severe pain during passive movement. On palpation, fluctuations and a local increase in temperature in the joint, limitation of movement are observed. The animal presses with the tips of the hooves, with bent, dislocated legs. A purulent exudate of a yellowish-blue color follows from the puncture site of the wound. Before surgical interventions, sick animals were weakened, they had an increased body temperature, rapid breathing and increased heart rate, decreased appetite and digestive function.

After the operation, on the 3rd and 5th days of treatment, in addition to conventional methods, after the cessation of pus, 4 ml of hydrocortisone + 10 ml of novocaine around the joint, 4 ml of chondrolone intravenously to reduce inflammation and the immunostimulant Butasal-100 are administered intravenously, in the second the experimental group significantly improved the general condition of the animals with purulent synovitis and the body temperature dropped to normal. Although the swelling of the joints is reduced, the animals keep the damaged joint in a bent position. Lameness and soreness are observed when moving.

By the 7-10th day of treatment, there was a slowdown in the inflammatory response, the disappearance of tumors and slight pain during passive movement, and by the 15th day of treatment, there was a complete recovery of the function and morphological structure of the damaged joint. In animals of this group with purulent arthritis, although the body temperature was within the physiological norm and 5 days after the operation, an improvement in the general condition was observed, an increase in the contour of the joint and tension of the diverticulum, pain and weakness of the limb during movement remained. By the 10th day of treatment, there was a decrease in the inflammatory process, a decrease in the tension of the joint capsule, numbness, pain, and by the 18th day of examinations, the contour of the injured joint in the animals was palpated in a normal anatomical section, and a painless position was observed, the tumors disappeared. Despite the fact that the joint capsule was slightly thickened, there were no differences in the size and mobility of the joints from healthy legs.

Animals with purulent synovitis of the first group, treated with conventional methods, are characterized by a slight decrease in body temperature, an increase and swelling of the joint, severe pain and palpitations on palpation, and passive movement five days after the operation. By the 10th day of treatment, with a significant slowdown in the inflammatory process, pain, lameness during passive movement were observed, and by the 20th day of observation, complete restoration of the anatomical structure and function of the joints was noted.

In animals of this group with purulent arthritis, on the 5th day after surgical treatment, there was a local increase in temperature and hyperemia, enlargement of the joints, pain on palpation and numbness.

From the 15th day of treatment, there was a significant decrease in pain in lameness, hyperemia, edema,

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passive movement. By the 25th day of treatment, signs of inflammation, anatomical structure and function of the damaged joint disappeared.

So, in horses, in the treatment of purulent inflammation of the joints of the fingers, in addition to traditional methods, after the cessation of the discharge of pus, hydrocortisone 4 ml + novocaine 10 ml around the joint, chondrolone 4 ml intra-articularly to reduce inflammation and intravenous administration of the immunostimulant Butasal-100 gave good results, treatment of purulent arthritis by conventional methods in animals in the group lasted on average 20-25 days, while in the group using hydrocortisone, novocaine, chondrolone and Butasal-100 after the cessation of additional purulent discharge by conventional methods, it was 15-18 days.

CONCLUSION

1. In sport horses, chronic suppurative synovitis was observed, the joint area was swollen, painful, fluctuating, with slight flexion of the injured joints of the legs of the animal, weakness, fever, enlargement of the affected joint relative to the joint of the opposite leg, and loss of skin elasticity.
2. In animals with purulent arthritis, general weakness, an increase in body temperature, an increase in the contour of the joint, contraction of the diverticula of the joints and severe pain during passive movement, fluctuations and a local increase in temperature in the joint during palpation, and restriction of mobility were observed.
3. In horses, treatment lasted an average of 20-25 days using traditional methods of treating purulent inflammation of the joints of the fingers, while in the group using hydrocortisone, novocaine, chondrolone and butazal-100 after cessation of additional separation of pus by traditional methods.

List of used Literature:

1. Borisov M.S. Aseptic synovitis in dogs // Journal of Veterinary Medicine. – 1991. - №7
2. Plakhotin M.V., Belov A.D., Esyutin A.V. and others. General Veterinary Surgery - Moscow Kolos 1981.
3. S.V. Timofeev and others. "Surgical infections" Moscow 2006.
4. Matveev V.L. Some questions of the pathogenesis and therapy of synovitis // Veterinary medicine. - 1978. - № 10. - P. 84-86
5. Niyozov H.B., Dzhuraev D., Fayziev U. Treatment of diseases of the joints of horses. // Agriculture of Uzbekistan. - Tashkent. 2012. - № 9.- P. 35-38.
6. Niyozov H.B., Zhuraev D. Some features of the etiopathogenesis of purulent arthritis in sport horses. // Veterinary medicine. - Toshkent, 2013. - № 1. -P.18-20.
7. Niyozov H., Dilmurodov N., Davlatov N. Treatment of aseptic diseases of limb distal part joints in Uzbek sport horses. “Journal of Microbiology, Biotechnology and Food Sciences”, №12. 2016. P.478-481. Nitra. (Jurnal impact 0.29 INDEX COPER Nicus).
8. Lebedeva N.M. Vascularization of the knee joint of a horse in health and disease // Collection of works of the Medical Veterinary Institute - Leningrad, 1951. - № 12. - P.111-116.
9. Ulimbashev M.B. Resistance to diseases of the extremities and biophysical characteristics of the hoof horn of cows (Text) // Veterinary Medicine, 2007. -№ 9. - P. 44