

Study of the Clinical Course of Myopathosis in Horses and the Effectiveness of Treatment

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Article History	Abstract
Received: 20 th March 2026 Accepted: 14 th April, 2026	This scientific work studied the clinical course of myopathy in horses, pathological changes in the muscular system, and the effectiveness of treatment. The aim of the study was to determine clinical signs in horses affected with myopathy, evaluate functional disorders of the locomotor apparatus, and analyze the effectiveness of комплекс treatment methods. During the study, decreased muscle tone, muscle pain, impaired coordination of movement, lameness, swelling, and a tendency to muscle atrophy were observed. Increased body temperature, pulse, and respiratory rate were also recorded in diseased horses. As a result of treatment, clinical signs in the experimental group decreased significantly, and the functional condition of the muscles recovered in a shorter period. The obtained results indicate the importance of early diagnosis and complex treatment in reducing the severity of myopathy in horses.
Keywords: Horses, myopathy, muscles, clinical signs, lameness, muscle tone, coordination, swelling, muscle atrophy, treatment, diagnostics	

The Relevance of the Topic. In order to raise healthy animals on farms and make full and quality use of them, great responsibilities lie before veterinary science and practice specialists, because only a healthy animal can meet all requirements. At present, horses are important not only in equestrian sports but also in small farming enterprises. The training system of sport horses and their participation in racing are associated with serious stress on the muscular apparatus of the limbs, which leads to excessive strain of certain muscles, and the severity of injuries may result in a decrease in the longevity of horses [7; 13-16-pg.].

Diseases of the muscular system in sport and working horses are among the most widespread pathologies in veterinary practice. In particular, myopathosis is characterized by the development of degenerative–dystrophic and inflammatory processes in muscle tissues, which sharply reduces the working capacity of animals. As a result of locomotor system diseases, the functional activity of muscles is impaired, muscle tone decreases, and pain syndrome as well as coordination disorders develop. This is manifested by lameness during movement, rapid fatigue, and general weakness in animals. Early diagnosis of myopathosis and the development of effective treatment methods remain among the urgent issues in veterinary practice [5; 11-13-pg.].

Research Methods. The research was conducted under clinical conditions at the Department of Veterinary Surgery and Obstetrics of Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology. Based on the collection of anamnesis data and clinical examinations, horses affected with myopathosis were divided into groups. A total of 6 horses aged 6–7 years with signs of muscular myopathosis were selected for the experimental and control groups. During clinical examinations, the general condition of the animals, muscular system, body temperature, pulse, respiratory rate, and locomotor system activity were examined. Using the palpation method, muscle pain, tone, tension, and morphological changes were assessed. For treatment purposes, комплекс therapy was applied. Horses in the experimental group received the Triveton preparation intramuscularly at a dose of 1 ml/30 kg, 2–3 times at intervals of every 2–3 days. In addition, the Penicillin + Streptomycin (Penstrep) preparation was administered intramuscularly at a dose of 1 ml/25 kg.

Research Results and Discussion.

As a result of clinical examinations, general weakness, rapid fatigue, and increased pulse and respiratory rates were observed in horses affected with myopathosis. In some cases, a subfebrile increase in body temperature (37.8–38.5 °C), sweating, and decreased appetite were recorded. In horses suffering from myopathosis, muscle relaxation, decreased muscle tone, and limitation of motor activity were identified. In certain cases, mild muscle pain was observed, which intensified during palpation or movement of the animal. In addition, weakness and a tendency toward atrophy in muscle tissues were noted, leading to a decrease in the overall mobility of the animals. Protective muscle tension in the affected muscles and restricted movement in the corresponding joints were also recorded. Depending on the duration of the disease, functional changes in the muscles became progressively deeper. A decrease in muscle tone, muscle weakness, and atrophic

changes were identified. In some cases, induration (hardening) of muscle tissues was observed..

Disturbances in the function of the locomotor apparatus were observed as important diagnostic signs. As a result of impaired coordination of contraction between antagonist muscles — extensors and flexors — as well as synergistic muscles, the movements of the animals became irregular and uncoordinated. In horses of the control group, shortening of the muscle relaxation phase and prolongation of the contraction phase were recorded. As a result, rapid muscle fatigue and quick exhaustion during prolonged work were observed. In horses of the experimental group, impaired intermuscular coordination, lameness in one or both limbs, and restricted movement in the joints were identified. Flexion and support of the limbs were painful and uncertain, characterized by a shortening of stride length. According to palpation results, the muscles were found to be hardened and painful. The development of induration foci and edema in the affected muscles was recorded. Accumulation of serous fluid was observed in the carpal and hock joints as well as in the tendon sheaths.

In the initial days of treatment, a slight increase in local and general body temperature was observed in horses of the experimental group; however, by the third day these indicators began to decrease. By the third day of treatment, pain reactions were reduced, and upon palpation muscle relaxation and smoothing of the muscle surfaces were identified. Body temperature was recorded in the range of 38.5–38.7 °C, heart rate 40–44 beats/min, and respiration rate 16–20 breaths/min.

By the 5th–6th days of treatment, the animals showed improvement in movement coordination; limb support became more stable and accurate, and the degree of lameness significantly decreased. On the 6th day of treatment, almost complete restoration of the functional activity and morphological structure of the affected muscles was observed.

In animals of the control group, clinical recovery occurred more slowly. Muscle pain, swelling, and movement restrictions persisted for a longer period. Only by the 10th day of treatment did the functional condition of the muscles return to normal.

Table 1

Changes in Clinical Parameters in Horses

No	Days of Experiment	Groups					
		Control			Experimental		
		T.	P.	R.	T.	P.	R.
1	Before the Experiment	39	50	20	39,3	51	21
2	On the 3rd of the Experiment	38,9	47	18	38,7	46	18
3	On the 6rd of the Experiment	38,7	46	17	38,4	42	13
4	On the 7rd of the Experiment	38,6	45	16	38,5	43	15
5	On the 10rd of the Experiment	38,4	41	13	38,7	46	18

According to the table data, normalization of clinical parameters occurred faster in horses of the experimental group compared to the control group. In particular, the return of body temperature, pulse, and respiratory rate to physiological norms indicates the effectiveness of the treatment.

Conclusions:

1. It was established that myopathosis in horses is accompanied by degenerative–dystrophic and trophic changes in muscle tissues, as well as impaired neuromuscular coordination.
2. In horses affected with myopathosis, general weakness, rapid fatigue, decreased muscle tone, muscle pain, lameness, impaired movement coordination, swelling, and induration were recorded as the main clinical signs.

3. It was determined that the applied complex treatment method in the experimental group of horses rapidly reduced clinical signs and accelerated the restoration of muscle functional activity.
4. In the control group animals, the recovery process lasted relatively longer, and normalization of clinical parameters occurred more slowly.
5. It was substantiated that early diagnosis of myopathosis and the application of complex treatment methods in practice play an important role in accelerating muscle tissue regeneration and restoring locomotor function in animals.

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