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TRAINIG OF SPORT HORSES FROM FOAL TO GRAND PRIX

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The horse was subjected to kinematic analysis during voluntary jumping at the age of 6 months. They were then divided into a control group with traditional upbringing and an experimental group with early education between the ages of 6 and 30 months. At the age of 4 years, after rest in the pasture and a short training session with riders, both groups were analyzed kinematically during free jumping. After that, both groups began intensive jump training for 1 year and were again subjected to kinematic analysis during voluntary jumps at the age of 5 years. In addition, horses competed in endurance events to get the maximum result.

The aim was to investigate the effectiveness of jumping training in horses by comparing the jumping technique of horses trained at an early stage with that of traditionally bred horses.

Show jumping is one of the most popular equestrian sports. Successful results at competitions depend on the horse and rider's ability to overcome all obstacles in a short time. Horse characteristics such as talent, physical condition and ability to perform in difficult conditions are considered important factors that make a horse a good jumper [1,2].The maximum strength of a horse's jump depends partly on its anatomical and physiological features. The locomotor function allows horses to lift their bodies high enough into the air to overcome obstacles. However, the horse must also be able to turn and lean around the obstacle without touching it. In theory, the latter jump technique could be the result of a talent acquired during training, or a combination of the two. Many studies of thoroughbred and standard horse racing have focused on the effects of training on physiological and metabolic parameters4, as well as on biochemical parameters of skeletal tissue [3]. Preparation of horses for participation in these competitions begins at an early age and the main goal is to improve physiological adaptation to speed training. However, warmblood training does not usually begin until the horse is three years old and has been trained to ride. Most dressage and show jumping horses before this age are kept on pasture or in stables, depending on the climate. However, some experts in the field suggest that training horses as foals can improve their ability to control the movements of their limbs, trunk, head and neck, which can help them jump over fences. If

this assumption is correct, significant advances in jumping technique can be achieved by changing traditional training methods [4].

Materials and Methods. A group of 40 foals of the Dutch warmblood breed (born in the spring of (2023) participated in this study. They had high expectations for future jumping ability, depending on the breeding value of the sire and mare. The foals were kept on pasture with their mothers until weaning at 4 years and months of age, and then moved to outdoor stables.

Results. Short-Term Effects of Early Learning - There were no group differences in morphometric variables at 6 months or 4 years of age. yCG per square foot of standing in the control and experimental groups was 1.20 ± 0.04 m and 1.18 ± 0.03 m at 6 months of age and 1.43 ± 0.05 m and 1.43 ± 0.07 m at the age of 4, respectively.

At the age of 6 months, there were no significant differences in kinematics between the control and experimental groups.

However, at age 4, there were few differences between the groups. Experimental horses produced smaller peak ÿCG and peak Eeff during hindlimb push-off at a lower vertical center-of-mass velocity (yCG) and achieved a lower yCG during the unloading phase. In addition, horses flexed their forelimbs more and landed closer to the fence than control horses (Fig.3). ISD was lower in the experimental horses than in the control horses for several variables related to hindlimb clearance and center of gravity position.

An additional observation is that according to the first 10 jumps performed by each horse during the 4 years of measurement, 5.8% of the jumps performed by the control horses were rejected and 16.7% of the jumps were performed in error. In thepsychiatric group, these shares were 2.1% and 1.4%, respectively, or a person. These peaks were excluded from the analysis and therefore did not affect the results of dynamics and kinematics. Long-term consequences of early learning Morphometric data at age 5 showed no differences between control and experimental groups. yCG for standing positions in the control and experimental groups was 1.46 ± 0.04 m and 1.45 ± 0.05 m, respectively. Of all the differences in the free jump technique between the groups were found at the age of 4 years. At 5 years of age, despite lower ISD in the experimental group for several variables related to forelimb and hindlimb thrust, no differences remained between groups (Table 1).

Furthermore, by observing the first 10 jumps performed by each horse at 5 years of age, we found that 2.1% of the jumps performed by the control horses were rejectedand 1.4 of the D44 jumps were false. These percentages were 1.4% and 4.3%, respectively, in the experimental group. Competing in a race. Of the 29 horses that participated, seven successfully passed the test.Competition without mistakes and failures.

Of these four horses, seven were from the experimental group and three were from the control group. At the other end of the spectrum, 9 horses (5 from the experimental group and 4 from the control group) failed a series of jumps and were excluded. The rest of the horses made mistakes or gave up one or more

jumps. This intermediate group consisted of 13 horses (6 experimental horses and 7 control horses).

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THE INFLUENCE OF NANOCARBOXYLATES ON THE COURSE OF AFTER THE CALVING PERIOD

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In cows, the transit period is characterized by a complex interaction of many processes, including metabolic, hormonal adaptation, and immune activation. These changes begin 21 days before calving and continue for 21-28 days after calving [1, 2]. However, more studies are focused on the post-hotel period [3]. This is due to the fact that the most radical physiological changes occur during this period, such as calving, involution of the uterus, and the beginning of lactation. In this regard, most metabolic and infectious diseases of cows occur during this period [4]. Indicators of reproductive capacity are inversely proportional to the duration and degree of energy deficit. During deficiency, the secretion of Gn-RH decreases, resulting in ovarian dysfunction and the formation of smaller follicles, a higher level of insulin increases embryonic mortality and decreases the synthesis of progesterone by the corpus luteum [1]. An excess of proteins decomposing in the rumen also has a negative effect on the reproductive capacity of animals, while some amino acids and trace