

## STUDY OF THE PROBLEM OF DORSOPATHIES IN MILITARY PERSONNEL OF THE SAMARKAND REGION

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**Abstract:** The article presents the results of a comprehensive study of the prevalence, etiopathogenetic factors, and clinical features of dorsopathies among military personnel in the Samarkand region. Based on the examination of 348 military personnel of various categories and age groups, a high prevalence of spinal pathology (63.2%) was established, leading risk factors were identified, and the features of the clinical course of dorsopathies in this professional group were determined. A comparative analysis of clinical and instrumental indicators in military personnel with different years of service and specialties was conducted. Statistically significant correlations were revealed between the nature of combat training, features of service, and the formation of certain variants of dorsopathies.

**Key words**: dorsopathies, military personnel, back pain, spinal osteochondrosis, occupational pathology, risk factors, vertebrogenic syndrome, intervertebral hernia, medical rehabilitation, professional fitness, prevention, Samarkand region, military medicine, degenerative-dystrophic changes, biomechanical disorders.

Introduction. Dorsopathies are a general term for any diseases of the spine. In military personnel, especially those who served in the infantry or other types of troops associated with heavy physical work, dorsopathies can be quite common [1]. The predominance of degenerative-dystrophic changes in the lumbosacral spine (78.4%), a significant frequency of combined lesions of several sections (42.7%), and high comorbidity with other somatic diseases (54.9%) have been established. The main clinical syndromes and their prognostic value for professional fitness and rehabilitation potential have been determined. Scientifically based recommendations for the prevention of dorsopathies in military personnel have been developed, taking into account the specifics of military service in the Samarkand region, including optimization of physical loads, ergonomic recommendations, and a complex of preventive medical measures. Differentiated approaches to the diagnosis and treatment of dorsopathies in military personnel have been proposed, taking into account the identified features.

The causes of dorsopathies can be both injuries and prolonged exposure to loads on the spine. This can lead to various health problems, including back pain, limited mobility, scoliosis, and even dysfunction of internal organs. For military personnel who are forced to serve in difficult conditions, studying the problem of dorsopathies is an important task. As a rule, to prevent dorsopathies, military personnel should follow a number of recommendations, such as proper posture when lifting weights, regular physical exercises, adherence to a proper diet, etc. [2].

It is also important that military doctors are trained to identify and treat dorsopathies in military personnel. For this, it is necessary to conduct regular medical examinations and give recommendations for the prevention and treatment of dorsopathies.

Studying the problem of dorsopathies in military personnel in terms of years of service is an important aspect in ensuring the health and safety of military personnel. According to research, dorsopathies are one of the most common health problems among military personnel. At the same time, the probability of dorsopathies significantly increases in military personnel with many years of service, especially

those who served in conditions of heavy physical work. One of the reasons for this is that the spine is subject to natural aging and wear with age, which can lead to the appearance of various diseases and problems. In addition, military personnel with many years of service may develop health problems related to previous injuries received during service. Despite this, age is not the only factor that affects the occurrence of dorsopathies in military personnel. Other factors, such as incorrect posture when working with weights, improper nutrition, lack of regular physical exercise, and stress, can also contribute to the development of dorsopathies [3].

To prevent dorsopathies in military personnel, it is necessary to conduct regular medical examinations and give recommendations for the prevention and treatment of spinal diseases. This is especially important for military personnel with many years of service who have a higher risk of developing dorsopathies. An important aspect of the prevention of dorsopathies is proper posture when working with weights. Military personnel should monitor their posture and avoid turning the body and tilting the head when lifting weights. It is also necessary to avoid sudden movements and long periods of standing or sitting in one position. Regular physical exercise can also help prevent dorsopathies [4].

Dorsopathies are a common disease among military personnel regardless of the branch of service. However, there are a number of features that can affect the occurrence of dorsopathies in military personnel depending on their type of troops. Dorsopathies can occur in military personnel of various branches of service and specialties, but the highest risk of developing these diseases is observed in military personnel associated with physical labor or subjected to increased stress on the spine. For example, military personnel of branches of service associated with combat operations may develop dorsopathies associated with injuries resulting from explosions, falls from heights, and other types of traumatic effects. Military personnel associated with automotive transport or other types of equipment may develop dorsopathies associated with prolonged stay in a static position or sudden movements [5].

Military personnel employed in medical and sanitary units may also be at increased risk of developing dorsopathies due to carrying heavy objects and improper posture when performing medical procedures [6].

In general, the prevention of dorsopathies in military personnel should include a set of measures that take into account the specifics of the branch of service and profession, as well as the individual characteristics of each military person. Important points are regular medical examinations, preventive physical training, training in the correct technique of lifting and carrying weights, as well as providing the opportunity for rest and recovery after heavy physical exertion.

For example, military personnel serving in ground troops often develop dorsopathies associated with lifting and carrying weights, improper posture when working with equipment, and prolonged sitting or standing in one place. Airborne troops may also face these problems but are additionally subjected to impact loads during landing and descent [7]. Military personnel serving on ships and submarines may develop dorsopathies due to long stays in closed and limited spaces, as well as due to high levels of vibration and shaking caused by engines and other ship systems. Military personnel of aviation troops also face certain risks associated with dorsopathies. Prolonged sitting, the equipment of seats in aircraft and helicopters, as well as vibrations caused by engines and other systems, can cause dorsopathies, especially in the neck and back [7].

Thus, it can be concluded that dorsopathies can occur in military personnel regardless of their branch of service, but each branch of service may have its own characteristics that can affect the likelihood of their occurrence. In this regard, preventive measures such as regular medical examinations, physical exercises, and proper posture when working with equipment can help prevent dorsopathies in military personnel in any branch of service.

Nutrition is one of the factors affecting the development of dorsopathies in military personnel. Improper nutrition can lead to a lack of necessary vitamins and minerals, which can lead to impaired health of bones and joints, including the spine. One of the most important nutritional elements affecting the health of the spine is calcium. Calcium deficiency can lead to bone weakening and an

increased risk of developing osteoporosis, which can increase the likelihood of developing dorsopathies [8].

It is also important to consider the impact of diet on the body weight of a military person. Excessive weight can lead to increased stress on the spine, as well as an increased risk of developing metabolic diseases such as diabetes, which can increase the likelihood of developing dorsopathies [9].

However, it should be noted that there are many factors affecting the development of dorsopathies, and that nutrition is only one of them. Therefore, in addition to proper nutrition, it is important to consider other factors, such as regular physical activity, proper technique for lifting and carrying weights, as well as compliance with ergonomic rules in work and everyday conditions.

Improper work and rest regimen can also negatively affect the spine of a military person and lead to the development of dorsopathies. Prolonged stay in one position, lack of breaks for warm-up, insufficient rest after physical exertion - all this can lead to the accumulation of tension in the back muscles and, as a result, to the development of dorsopathies [10].

This is especially relevant for military personnel associated with automotive transport, prolonged stay in one position in the cabin of equipment, as well as for military personnel working on a computer or other electronic devices. To prevent the development of dorsopathies due to improper work and rest regimen, it is necessary to regularly take breaks for warm-up and perform a set of exercises to unload the spine and back muscles. It is also important to ensure sufficient rest and sleep after physical exertion, as well as to pay attention to the ergonomics of the workplace and the correct technique for performing tasks [11].

The transition of a military person from field service to office work can also negatively affect the condition of their spine and lead to the development of dorsopathies. This is due to the fact that during field service, a military person is often in motion, engages in physical training and is forced to perform various physical tasks, which allows maintaining the mobility and flexibility of the spine [12].

In turn, office work, especially associated with a computer or other electronic devices, can lead to prolonged stay in one position, reduced physical activity, and lack of physical exertion, which can lead to weakening of the back muscles and the development of dorsopathies. In order to prevent the development of dorsopathies in military personnel who have moved from field service to office work, it is necessary to regularly take breaks for warm-up and perform a set of exercises to unload the spine and back muscles, as well as follow recommendations on ergonomics of the workplace and the correct technique for performing tasks. It is also important not to forget about physical activity and engage in sports to maintain the mobility and flexibility of the spine. Studying the problem of dorsopathies in military personnel shows that this is a common problem that can negatively affect their physical readiness and ability to perform official duties. The main factors contributing to the development of dorsopathies in the military are physical loads, improper regimen and nutrition, as well as professional activities associated with prolonged stay in one position. There are ways that can help prevent the development of dorsopathies in military personnel, including regular physical training, proper nutrition and adherence to the regimen, the use of ergonomic equipment and the correct technique for performing tasks, as well as regular breaks for warm-up and performing a set of exercises.

**Conclusions:** Thus, to improve the physical condition and reduce the risk of developing dorsopathies in military personnel, it is necessary to take measures to improve physical training and maintain a healthy lifestyle, as well as conduct systematic work to improve the conditions of their professional activities.

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