

MAIN DISEASES AND INJURIES RELATED TO OCCUPATIONAL ACTIVITIES, PREVENTION AND TREATMENT

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Abstract: RSI/DORT is an acronym for Repetitive Strain Injuries and Work-Related Musculoskeletal Disorders, a set of clinical conditions that affect muscles, tendons, nerves and joints in workers from different professional areas (BRASIL, 2017). Injuries occur when there is an imbalance between the physical load required by work and the worker's ability to support it.

Keywords: RSI, WMSD, worker's health

In this text, in a concise manner, the main diseases that make up Repetitive Strain Injuries and Work-Related Musculoskeletal Disorders, here simply referred to as RSI/DORT, will be presented in a concise manner. Preventive measures and treatments available. Main Diseases: the generic term encompasses several clinical conditions, some of which are: tendinitis, carpal tunnel syndrome, lateral epicondylitis, de Quervain's tenosynovitis, bursitis, impingement syndrome, frozen shoulder syndrome, among others.

Although each of these conditions has specific symptoms and treatments, they all have in common the fact that they are related to activities that require repetitive physical effort, inappropriate postures, sudden movements, among other factors. Symptomatology - As they are diseases that affect the musculoskeletal system, they can manifest with a variety of symptoms, the most common of which include pain, fatigue, tingling, numbness, heaviness or tightness, stiffness, swelling, among others (CHIAVEGATO FILHO; PEREIRA JR, 2004; MORAES; BASTOS, 2017). Pain is the most frequent symptom and can be localized or radiate to other regions. The pain usually gets worse with movement and physical activity and improves with rest. In some cases, the pain can be so intense that it not only takes the patient away from the job, but also prevents him from carrying out daily activities. Muscle

fatigue is another common symptom in RSI/DORT. The feeling of tiredness and weakness are the result of intensive use of restricted muscle groups. It is essential that, whenever possible, there is rotation between workers and different sectors of industry, health workers, commerce, etc. That previously mentioned feeling of tingling or numbness (paresthesia) may be the result of nerve compression due to inflammation or overloading of the affected muscle structures: the inflammatory process mobilizes fluids to the muscle group, and may also cause a feeling of heaviness or tightness in the region. Stiffness and swelling are symptoms that can also be present, especially when few joint groups are affected. Rigidity compromises range of motion, agility, mobility and joint flexibility, while swelling is the result of inflammation of muscle structures and leakage of fluid into the interstitium. In addition to the symptoms already mentioned above, other symptoms such as discomfort, loss of strength and muscle tone may also be present. It is important to point out that the symptoms may vary according to the type of RSI/WMSD and the affected region, and it is essential that the diagnosis be carried out by a specialized professional as soon as possible, it is important to emphasize that, as with other injuries, the chronicity of certain tissue damage can cause irreversible repercussions. Prevention - RSI/WMSD prevention also involves the adoption of ergonomic measures aimed at adapting working conditions to the worker's capacity, in order to minimize physical overload and reduce the risk of injury (SANTOS; ALMEIDA; GAZERDIN, 2016). Some measures that can be adopted are: the adequate choice of equipment and work furniture, the adoption of correct postures, taking rest breaks and stretching exercises, dividing tasks into smaller steps, among others. Ergonomic measures are essential to prevent illness or the aggravation of work-

related illnesses. Once the working conditions are adapted to the worker's capacity, it is scientifically proven that the physical overload is minimized, as well as the risks of injuries and absenteeism. Ergonomics studies the relationship between human beings and the work environment, seeking to optimize the interaction between both (RODRÍGUEZ-BLANES et al., 2019). The adoption of measures can help prevent a series of work-related diseases, such as RSI/WMSDs, spinal injuries, vision problems, among others (ROBERTSON; O'NEILL, 2003). In addition, the measures can contribute to improving productivity and quality of work and quality of life, as they help to reduce the number of errors and accidents at work, as well as reduce worker fatigue. The most important ergonomic measures go beyond the proper choice of work equipment and furniture. Whenever possible, the appropriate choice of equipment and work furniture must take into consideration, the physical characteristics of the workers or adjust parameters such as height, weight, length of limbs, among others. The adoption of correct postures is essential to avoid overloading the joints and muscles, preventing the appearance of new and worsening old injuries. Making use of ergonomics is contributing to the prevention of work-related illnesses and to improving the quality of life of workers. Treatment - The treatments of LER/DORT vary according to the type and severity of the disease (GARCÍA et al., 2009). Non-surgical treatments include conservative therapies such as physiotherapy, medication to relieve pain and inflammation, use of support devices such as orthoses and splints, as well as guidance for changes in activities and work routines. Physical therapy is one of the main treatment options, as it helps to relieve pain, increase flexibility and muscle strength, improving the ability to carry out daily activities. In addition, physical therapy

may include myofascial release techniques, massage, and stretching exercises, which help to reduce muscle tension and prevent disease from getting worse. Medications to relieve pain and inflammation, such as analgesics, anti-inflammatories and muscle relaxants, are also important in the acute phase of the disease, as they help control pain and reduce inflammation. Support devices such as orthoses and splints can be useful to immobilize the affected region, reducing overload and worsening of the injury. Guidance for changes in activities and work routines and rotation of activities are also important in the treatment of RSI/DORT. These changes may include reducing the workload, adopting rest breaks, performing physical activities and stretching, in addition to other measures to reduce the overload in the affected areas (KAJIKI et al., 2017). Surgical treatments are indicated in more severe cases that are refractory to non-surgical treatments. Surgery can be performed to relieve pressure on affected nerves or tendons, remove damaged tissue or correct deformities, however, it is important to note that surgery is not an option for all cases of RSI/WMSD and must be evaluated on a case-by-case basis by the specialist doctor and multidisciplinary team. It is essential that treatment be started early in order to avoid the worsening of the disease and ensure a faster and more efficient recovery. Conclusion - RSI/DORT is a health problem that affects many workers from different professional areas across the planet. Physical overload, lack of use of ergonomics and inadequacy of the work environment are some of the main causes of these diseases. The prevention of RSI/DORT, as already ventilated, necessarily involves the adoption of ergonomic measures that aim to adapt working conditions to the worker's capacity, in order to minimize physical overload and reduce the risk of injury (HYEDA; DA

COSTA, 2017). The treatment of RSI/DORT is done with medication, physiotherapy sessions and rehabilitation measures and adaptation of the work environment. In more severe cases, surgery may be required. It is essential that companies and workers are aware of

the importance of continuous self-care, prevention and adequate treatment of these diseases, in order to guarantee the health and quality of life of affected workers and reduce the incidence of sequelae and complications in the short, medium and long term.

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