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The importance of assisted body building training in Lumbociatalgia

Abstract

Low back pain is one of the most common causes of morbidity, and functional and economic incapacity. It is currently the fifth leading cause of medical consultation, and according to epidemiological studies, between 65 and 90% of adults may suffer from lumbosciatalgia. Physical activity improves quality of life and reduces the symptoms of chronic pain. Assisted weight training consists of performing the sport under the guidance and supervision of a trained professional. This study aims to discuss the importance of assisted weight training in lumbosciatalgia. This is a literature review study, using the following databases: PubMed, Lilacs, and ScienceDirect, selecting 15 articles that best met the study criteria, published from 2014 to 2021. It is estimated that around 60% of the Brazilian population does not practice any physical activity. The best way to prevent future low back pain is to avoid resting, exercise within the proper limits, and be assisted by a professional. It can be concluded that exercise is important for lumbosciatalgia and low back pain, as it reduces inflammatory markers, causes analgesia, and is an excellent therapy for preventing future low back pain and improving the individual's quality of life.

Keywords: lumbosciatalgias, low back pain, assisted training, weight training

Volume 16 Issue 3 - 2024

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Received: March 16, 2024 | **Published:** July 08, 2024

Introduction

Low back pain is one of the most common causes of morbidity and functional and socioeconomic disability. It is currently the fifth cause of medical consultation, according to epidemiological studies, 65 to 90% of adults may experience low back pain.[1] The literature indicates that more than 50% of adults suffer from low back pain annually and the chronic incidence can vary from 4 .2 to 14.7%.[2] However, in the provision of primary care by non-specialist doctors, only 15% of low back pain and sciatic pain have a specific cause.[3]

The difference between low back pain and lumbosciatica is crucial in staging. Low back pain is a pain with a mechanical characteristic located in the lumbar region and gluteal fold and lumbosciatica, and when this pain and discomfort radiates to the limb, to one or both buttocks and/or to the posterior region of the thigh.[1] They can be classified according to the duration of pain as acute, subacute or chronic. Studies have shown that in 2022, approximately 17.7% of the population of South America suffered from chronic pathologies, among them, 8% are related to the spine, with the main pain syndrome being chronic low back pain.[4]

Chronic pain is characterized by lasting more than three months.[5] In light of this, the Brazilian Society for the Study of Pain claims that 60 million Brazilians experience chronic pain every day. Practicing physical exercise improves muscle strength and function, as well as promoting improvements in motor skills and weight loss.[6]

Practicing physical activities improves quality of life and reduces symptoms of chronic pain.[6] Assisted bodybuilding training consists of performing the sport with guidance and monitoring from a trained professional. Unlike acute pain, where the classic treatment involves rest and the use of medication, in chronic pain this type of treatment is ineffective. On the other hand, the treatment plan for chronic pain is multifactorial and includes physical activity as a treatment plan. Furthermore, studies show that physical exercise reduces the intensity of pain.[7] Therefore, the objective of the work is to address the importance of assisted weight training in low back pain.

Methodology

This is a study of an integrative bibliographic review. The Pubmed, Lilacs and Sciencedirect databases were used, using the descriptors: 'back pain' and 'physical exercise'. 15 articles were selected that best met the study criteria, available in Portuguese and English and published between 2014 and 2021.

The article selection criteria included those that address relevant aspects and their epidemiological profile, as well as their definition, risk factors, etiology, signs and symptoms, pathophysiology, diagnosis, treatment and complications. Articles whose summary reading was unrelated to the topic were excluded.

Scratchs

This research involves minimal risks, such as the fact that applying a questionnaire may cause embarrassment.

Benefits

Stratification of the risk factors involved in this type of injury for greater understanding by public bodies and health professionals, with the aim of designing public health strategies to reduce social harm. In addition to helping to direct patients who experience the problem and are not under medical supervision, directing them to treatment, reducing sequelae and acting on prevention.

Results

The need to seek positive correlations between low back pain and the practice of physical exercise is extremely important in a context where up to 84% of people experience an episode at some point in their lives of pain related to the lower back with irradiation.[8] In our current literature base, it is possible to verify a protective effect of leisure-time physical activity on chronic low back pain, reducing the incidence by up to 16%.[9]

The diagnosis of low back pain is clinical and, if necessary, confirmed through a complementary exam: magnetic resonance imaging. It soon becomes essential to outline a pattern in the patient's pain, take a detailed anamnesis and perform a complete and thorough physical examination. For the most part, acute low back pain is self-limited[10] and rest is quite effective in these conditions, Therefore, as soon as the patient's ambulation is possible, this rest time must be reduced so that the patient can return to their usual activities as quickly as possible. Drug treatment is focused on symptomatic pain control, through analgesics, anti-inflammatories and corticosteroids, so that the patient can have a faster and more effective functional recovery.[11]

It is estimated that around 60% of the Brazilian population does not practice any physical activity.[10] A sedentary lifestyle is directly associated with the appearance of chronic diseases such as a reduction in physiological parameters, linked to the aging process.[12] It is also known that the modern lifestyle makes it difficult to carry out physical exercise in a regular and coordinated manner. The importance of implementing physical activity in a supervised and well-directed manner is indisputable, allowing for better quality of life, a lower percentage of risks associated with exacerbated or inadequate practices that can lead to serious injuries.[13]

Discussion

Practicing physical exercise promotes a reduction in the percentage of body fat, in addition to reducing markers of inflammation and, consequently, favors the reduction of chronic pain.[4] Furthermore, practicing physical exercise is one of the foundations for a quality and healthy life. However, practicing physical activities without proper precautions can result in several problems.

For this reason, it is crucial to have the assistance of a specialist to ensure adequate assisted training before starting to exercise or play sports. This measure is valid for both intense activities, such as weight training, and lighter exercises, such as outdoor running, as they all require effort from the joints and muscles.[14]

According to the article "Physical exercise and pain education program for adults with chronic low back pain in Brazilian Primary Care: feasibility study" it is observed that the group that did not participate in physical exercise has greater pain intensity and a less favorable prognosis in relation to group that adhered to assisted training, that is, those who followed the correct treatment plan, physical exercise, achieved a significant improvement in pain.[7] Furthermore, Guedes and Guedes state that daily physical activity can influence rehabilitation of some pathologies.[4]

The phenomenon of analgesia imposed by the practice of physical exercise is observed mainly in high-performance athletes, however studies carried out demonstrate the experiment with sedentary people and people who practice physical exercise in a non-professional way and it was possible to verify a significant increase in the pain threshold in patients with chronic pain.[15]

The best way to prevent future low back pain or contain a future case of low back pain or sciatic pain is to avoid rest, therefore, carrying out physical exercise within the appropriate limits and monitored by a specialized professional prevents low back pain. Stressing that rest consists of a temporary, time-limited therapeutic measure during an acute pain crisis.[15]

The higher prevalence of back pain in the smoking population, compared to the non-smoking population, indicates a greater chance of this type of pain in smokers and ex-smokers, when compared to people who have never smoked.[8] Furthermore, other predisposing factors are associated with back pain, such as: musculoskeletal diseases and a poor perception of one's own health. Furthermore, it is worth noting that low back pain is more prominent in low- and middle-income countries due to multiple factors.[14] That said, the interdisciplinary nature of this proposed work is justified, adding knowledge, with the increase in the number of back pain and its social, economic and scientific repercussions. Aiming to evaluate the results obtained and actively contribute to the therapeutic management of patients with low back pain and the variables found, in order to reduce the risk of complications and assist in prevention.

Conclusion

It is concluded that the practice of physical exercise is important for low back pain and low back pain, it reduces markers of inflammation, causes an analgesia phenomenon, and is an excellent therapy to prevent future back pain and improve the individual's quality of life. However, this practice should Being supervised by professionals in the field to avoid possible injuries, both during more intense and less intense exercises, being well accompanied has good results.

Acknowledgments

None.

Funding

None.

Conflicts of interests

The author declares that there are no conflicts of interest.

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Citation: De-Oliveira BG, Marques MAA, de Queiroz LM, et al. The importance of assisted body building training in Lumbociatalgia. *MOJ Orthop Rheumatol.* 2024;16(3):106–108. DOI: 10.15406/mojor.2024.16.00671