TRIGGER POINT THERAPY IN MYOFASCIAL PAIN SYNDROME

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Introduction: Chronic myalgia has a significant impact on health, affecting millions of people worldwide. It is well known that trigger points (TP) when they become active or are in a latent state usually appear in the same areas of muscles, conditioning creation of TP maps. These maps indicate the affected areas of the muscles identified as TP and the radiation of pain to the neighboring or distant areas. In recent decades, the advancements in understanding the pathophysiology of myofascial pain have led to innovative approach and modernization of treatment methods, focused not only on reduction of symptoms, but also, on deactivating trigger points and adjusting factors that contribute to pain maintenance. As a goal of this research was to study the modern treatment methods of TP in myofascial pain syndrome (MPS).
Materials and methods: Sixty-four bibliographic sources from Google Scholar, PubMed, Hinari, Cambridge Core, Web of Science databases, which offered details about the morphology, topography, etiopathogenesis and treatment methods of TP were studied.
Results: The contemporary approach of MPS treatment is integrated and multimodal, combining manual therapy, minimally invasive techniques, advanced physical methods, therapeutic exercise, and patient education. The therapeutic mechanism of the dry needling method involves breaking the pain-spasm-pain cycle by producing a local contractile response, normalizing the dysfunction of the terminal motor plate, releasing algogenic substances accumulated in the TP area, and improving local circulation and tissue oxygenation. The method of local infiltration with anesthetics is based on the rapid deactivation of the trigger point by the direct injection of an anesthetic substance into the hypersensitive area of the affected muscle. Ischemic compression is a manual therapy method that involves the application of direct, constant, and progressive pressure on the trigger point, aiming to reduce hypersensitivity and normalize muscle tone. Shockwave therapy is based on increasing the permeability of cell membranes, thereby facilitating the release of anti-inflammatory mediators and endorphins, which activate the descending pain inhibition systems. Spray and stretch are used as therapeutic methods for the rapid relaxation of the TP in an affected muscle and for increasing the amplitude of muscle movement.
Conclusions: Contemporary management of MPS is multimodal, individualized, combining minimally invasive treatment methods with non-invasive techniques to contribute to the recovery of muscle function and the quality of life of patients affected by chronic myofascial pain.
Keywords: trigger points, myofascial pain syndrome