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[Cryostimulation as an antioxidative factor in sclerosis multiplex].

[Article in Polish]

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Source

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Abstract

Cryostimulation is becoming popular in medicine and sport. However, changes that occur in the human body subjected to cryogenic temperatures are still not completely understood. Sclerosis multiplex (MS) is a complex disease with several pathophysiological processes: inflammation, demyelination, oxidative stress, axonal damage and repair mechanisms that participate in this disorder. These processes are not uniformly represented [in patient](#) populations but can selectively predominate in individual patients. Oxidative stress plays an important role in pathophysiology of MS. Currently approved therapies for relapse-remitting [multiple sclerosis](#) target only the onset of multiple sclerosis. There is a need for developing new therapies especially in progressive phase of MS that are more process-specific and can be used in specific patient subpopulations. Cryostimulation is a short term lasted 2-3 min cooling of whole body cryotherapy with temperature between -110 degrees C and -160 degrees C. Currently studies suggested antioxidative role of cryostimulation in MS patients. The further studies of oxidative stress in MS patients are required to explain the role and antioxidative mechanisms of WBCT in MS patients treatment.

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