

Is Physiotherapy Effective to Treat Delayed Onset Muscle Soreness?

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Delayed Onset Muscle Soreness (DOMS) is a feel of pain and discomfort results from intensive eccentric exercise and can be a restricting factor of physical performance for several days. The severity of DOMS is variable, ranging from mild discomfort to extreme soreness [1]. Different mechanisms are proposed for DOMS such as lactic acid, connective tissue damage, inflammation, free radicals and enzyme efflux theories [2]. According to these theories, it is suggested appropriate strategies for DOMS treatment that three main of them are:

1. Anti-inflammatory drugs
2. Antioxidants therapy and
3. Physiotherapy modalities.

Physiotherapy curative modalities are one of the most prevalent procedures to treat DOMS. Scientists in this area have used both traditional modalities as massage [3] and modern ones as laser therapy [4] to treat DOMS. Unfortunately, in spite of diversity of modalities in this domain there is huge discrepancy and controversy in results. In one hand, some investigators indicate fruitfulness of some modalities such as massage, moderate exercise and continuous ultrasound. On the other hand, a majority of them pointed out modalities such as cryotherapy, Transcutaneous Electrical Nerve Stimulation (TENS), Interferential Therapy (IFT) and low intensity laser are not conducive or have little effects [2]. However, recent studies show moderate-

intensity aerobic recovery exercise is possibly more effective modality [5].

Assessment of related literature indicates a paucity of investigations in this domain. It seems there is a kind of blasé among physiotherapist to challenge in this area and scarcity of study in most modalities is observable. The reason is unclear but it is possibly because mechanism of DOMS is not well defined. It is obvious that there is a long way to reach a consistency about the effectiveness of different types of physiotherapy modalities on DOMS treatment and it is not accessible except through novel research methods in physiotherapy.

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