

# **Commentary**

## Management of Musculo-Skeletal Pain

Areerat Suputtitada\*

Department of Orthopaedics, Chulalongkorn University, Thailand

\*Address Correspondence to Areerat Suputtitada, E-mail: Areera@chula.ac.th

Received November 02, 2021; Accepted: November 16, 2021; Published: November 23, 2021

Copyright © 2021 Areerat S. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

#### Introduction

Musculo-skeletal disorders are the conditions have a direct impact on the bones, muscles, joints, and ligaments. Contractor pain is most commonly caused by a degree of injury to the bones, joints, muscles, tendons, or ligaments. Falls, sports injuries, and automobile accidents are just a few examples of events that might cause pain. Some of the disorders are Arthritis, together with arthritis, rheumatoid arthritis, lupus, degenerative arthritis, gout, and rheumatoid spondylitis, Osteoporosis, Muscle loss (sarcopenia), Muscle pain (myalgia) from Associate in Nursing injury, infection, cramp or spasm, loss of blood flow to the muscle, or tumor, tendon and ligament pain, like from a sprain, strain, or inflammation from redness or synovitis, fibromyalgia, that causes pain in tendons, muscles, and joints throughout the body.

The management of musculoskeletal pain in rehabilitation is difficult. Because of poor management during the acute pain phase, the majority of patients developed chronic pain disorders. Extracorporeal shock wave therapy (ESWT) and Class IV lasers, often known as high-power laser therapy, are currently being used to treat various disorders. Both therapies offer the same advantages on musculoskeletal pain problems and are considered regenerative medicine therapies, despite their differing actions and processes. Both therapy are becoming increasingly popular around the world due to evidence of safety, efficacy, and good patient compliance. ESWT has become one of the most well-studied therapy methods for musculoskeletal disorders such as myofascial pain syndrome, tendinopathies, and osteoarthritis, among others.

Three treatment sessions at one-week intervals, with 2000 impulses per session and the maximum energy flux density possible, appear to be the best treatment strategy for ESWT. Direct effects on tissue hardening, cavity formation

in the cells which alters it's activity, hyper vascularity and blood flow increment, alteration of cell membrane permeability, and effects on nociceptors through hyper stimulation, blocking the gate control mechanism are some of the proposed mechanisms for the benefit of ESWT on musculoskeletal tissue. Class IV lasers, often known as high-power laser treatment, provide a superior therapeutic success than Class III lasers for the following reasons.

Wider therapeutic energy dosages, deeper penetration into the body, and a larger treatment surface area are all advantages. When treating big areas like the lumbar spine, quadriceps, or hips, this is critical. Higher power density, constant power supply, and improved fiber optic cables: Laser energy is transmitted from the laser to the treatment probe at the other end of the wire through fiber optic cables. ESWT and high-power laser therapy have anti-inflammatory, analgesic, rapid tissue repair and cell proliferation, improved vascular activity, released trigger points and desensitization, and reduced fibrous tissue formation effects on musculoskeletal tissues.

Finally, ESWT has been proven in numerous high-quality RCTs for over 20 years as a successful and safe non-invasive treatment option for tendon and other musculo-skeletal system disorders. By far the most intriguing new therapeutic treatment to enhance physical medicine in the twenty-first century, high-power laser therapy has anti-inflammatory and analgesic benefits. It provides a superior therapeutic outcome than Class III lasers, which have been around for a long time but haven't shown much promise. High-powered laser treatment is a relatively novel therapy with growing evidence.

#### Acknowledgments

The Authors are very thankful and honored to publish this

article in the respective Journal and are also very great full to the reviewers for their positive response to this article publication.

### **Conflict of Interest**

We have no conflict of interests to disclose and the manuscript has been read and approved by all named authors.