

Massage Therapy and Kinesio Taping for Myalgia in Covid Patients

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Abstract: The Covid 19 epidemic has had a massive influence on humanity. People are suffering not only physically, but also financially and emotionally. Those who are afflicted with this fatal virus have a variety of bodily symptoms. One of them is myalgia. To minimise future difficulties, it must be treated effectively. Massage therapy and Kinesio taping are two interventions that can be used to treat myalgia, also known as muscular soreness or pain. It can be speculated that Massage therapy and Kinesio taping can be used to treat Covid 19 patients with Myalgia based on the results of studies on the effects of Massage and Kinesio Taping and the currently understood pathophysiology underlying Myalgia

Keywords: Covid 19, Myalgia, Massage, Kinesio Taping

Introduction: A corona virus causes Covid 19, a mild to severe respiratory disease (severe acute respiratory syndrome coronavirus 2 of the genus Beta coronavirus). Fever, cough, and shortness of breath are among the symptoms, which are transferred mostly through contact with infected material (such as respiratory droplets) or objects or surfaces contaminated with the pathogenic virus.¹A rainbow of symptoms may be identified in a patient with Covid-19. One of the most prevalent symptoms is a fever or chills. Asthma symptoms include coughing, shortness of breath, and difficulty breathing. Fatigue, Muscle aches or aches all over the body A scratchy throat, a headache, or a loss of taste or olfactory sensation If you're suffering from congestion or a runny nose, Nausea and vomiting are both symptoms of nausea^[2].

Myalgia, often known as muscular discomfort or muscle pain, is one of the most common complaints in Covid patients. According to Adem Kucuk, Medine Cumhur Cure, and Erkan Cure, Covid 19 penetrates the cell by penetrating ACE2 (present in the brain, kidney, vascular smooth muscle, and skeletal muscles) at low cytosolic pH, producing hyperlactatemia and oxyglycemia impairment [3]. Increased creatinine kinase levels following COVID-19 infection show muscle involvement. The musculoskeletal system may remain deoxygenated and muscles may become ischemic during COVID-19 infection, as if exercising strenuously. Furthermore, overexpression of growth factors, cytokines, ischemic conditions, and microvascular abnormalities might produce pain in the dorsal root ganglion during hypoxic ischemia.

According to various experts and people who have had personal experience with massage, it effectively reduces muscular soreness and relieves pain caused by it. Massage therapy is the scientific manipulation of the body's soft tissues for the purpose of normalising those tissues, and it includes manual techniques such as applying fixed or movable pressure, holding, and/or moving those tissues^[4] Numerous research

on the subject have also been undertaken, indicating the usefulness of massage in relieving muscle soreness.

When a person experiences pain in any portion of the body, he or she will usually modify his or her posture to alleviate the discomfort, which can result in a variety of abnormalities. These postural maladjustments can become permanent if left untreated for a long time, resulting in a plethora of other issues. . As a result, these compensating bodily misalignments had to be corrected. One of the more efficient methods is kinesio taping. Kinesio taping relieves pain and helps lymphatic drainage by microscopically lifting the skin. Skin spasms are caused by this lifting effect, which improves interstitial space and lowers inflammation in the affected areas [5]. It maintains the proper alignment of the bones that make up the joints and prevents them from deforming.

The purpose of writing this article is to: The novel corona virus has had differing degrees of influence in various parts of the world.

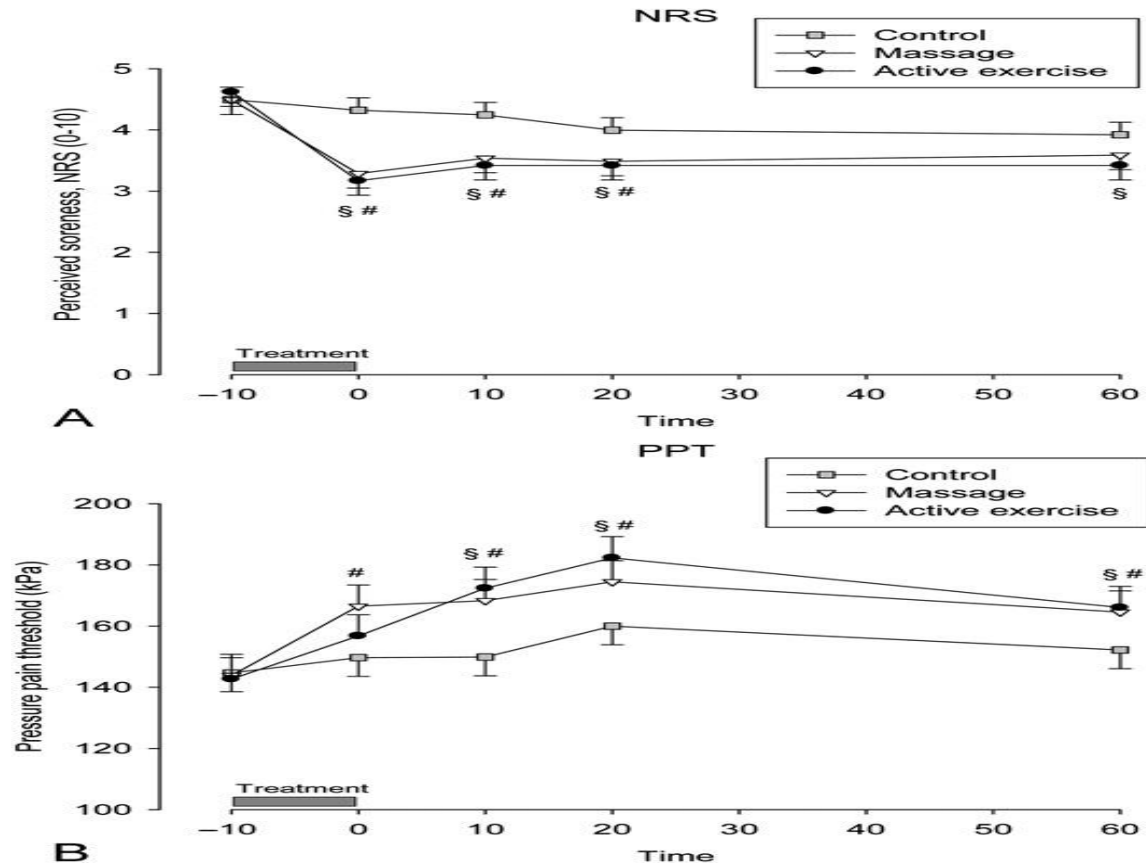
Death rates had already surpassed all previous records. Medical interventions for the treatment of the disease, on the other hand, are becoming more common by the day, resulting in a higher percentage of recovery. Patients who have successfully battled the infection face a raft of extra complications. One of the most common symptoms among Covid users is myalgia, for which there are few treatments available. Massage and taping methods are two of the most effective myalgia treatments available to Covid patients.

Article:The first case of Covid 19 was detected in Wuhan, China, on December 31, 2019. After that, it spread over the rest of the world. Kerala, India's first known instance, was reported on January 30, 2020. Covid 19 was declared a Pandemic on March 11, 2020. To control the spread of the new Corona virus, lockdowns, social distancing, increasing the frequency of sanitization, using masks, and other measures were used. The scene, however, quickly became out of hand. A large number of persons were infected, and as a result, they faced a variety of problems. At initially, the specific treatment was unknown, resulting in an increase in death rates. Furthermore, many therapy were used to bring the illness under control.

The novel corona virus causes a variety of symptoms in those who are afflicted. Some of the most common symptoms include fever, cough, shortness of breath or difficulty breathing, exhaustion, muscular or body aches, and loss of taste or smell.

In order to treat more serious symptoms, myalgia is routinely disregarded. However, because the patient may become irritated and nervous, this could be one of the most concerning symptoms for the patient's emotional and mental health. As a result, skilled leadership is essential.

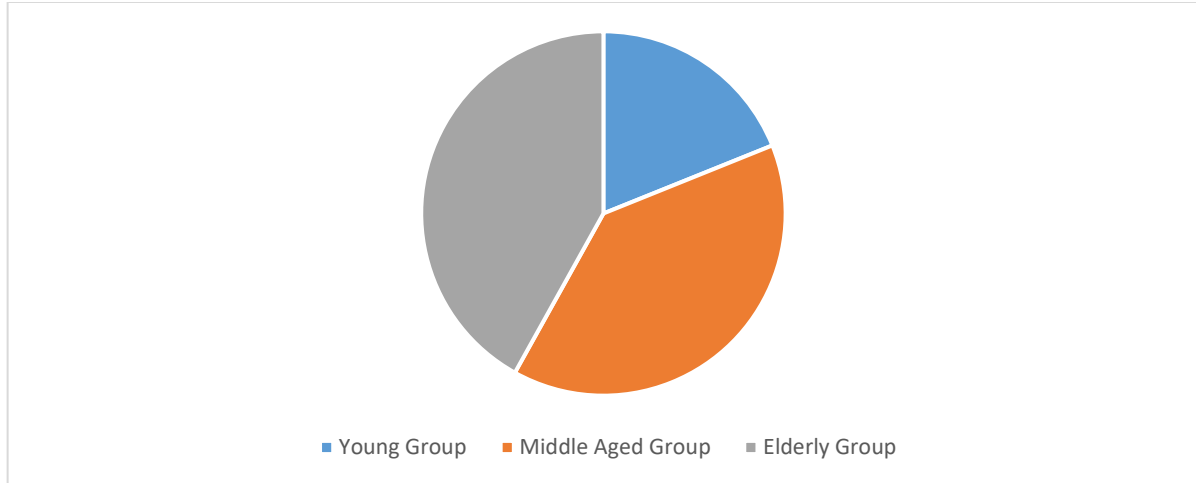
A study with 20 healthy female volunteers (mean age=32) was published in *The Journal of Strength and Conditioning Research* (Year 2013) [6] by Andersen, LL, Jay, K Anderson, CH Jakobsen, MD Sundstrup, E Topp R, and Behm, DG. After 48 hours, the patients were subjected to eccentric upper trapezius muscular contractions, which resulted in muscle soreness. Massages and strenuous workouts were then offered to these patients to assist them recover from their muscle soreness. To begin, one shoulder was given one treatment (massage and active exercise), while the other was left untreated. The shoulder that had been kept passive throughout the last treatment received the second treatment after 2 hours. The examiner examined the pressure pain threshold of the area to be researched, namely the upper trapezius, immediately before treatment and 0, 10, 20, and 60 minutes after treatment, and the participants were asked to rate the level of soreness on a scale of 0-10 after both treatments.



The pressure pain threshold (PPT) and perceived soreness (numerical rating scale 0-10) of the upper trapezius muscle before and after 10 minutes of massage, active exercise, and passive control (A) and 0, 10, 20, and 60 minutes after 10 minutes of massage, active exercise, and passive control (B).

The benefits of massage on delayed onset muscular soreness were studied by J E Hilbert, GA Sforzo, and T Swensen [7]. (This article was published in the British Journal of Sports Medicine.) DOMS was induced in 18 healthy volunteers by doing 6 sets of 8 maximal eccentric right hamstring contractions, followed by massage 2 hours later.

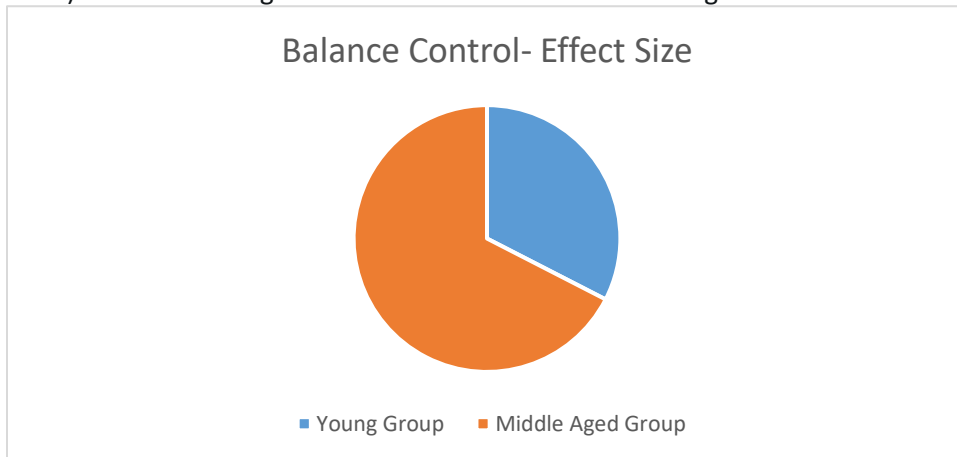
In a study published in the journal Sportmont [8, the effects of roller massage, massage, and cold bath on lactate elimination and delayed onset muscular soreness were studied. The examiners chose 30 students at random after a 10-minute warm-up and directed them to complete the RAST (Running-based Anaerobic Sprint Test). All of the pupils' blood lactate levels were tested after 8 minutes of RAST. The students were then placed into three groups, each of which received a different type of therapy. As a result, researchers discovered that ice bath therapy (17.40) is more effective than massage (16.65) and roller massage in removing lactate. (12.45)

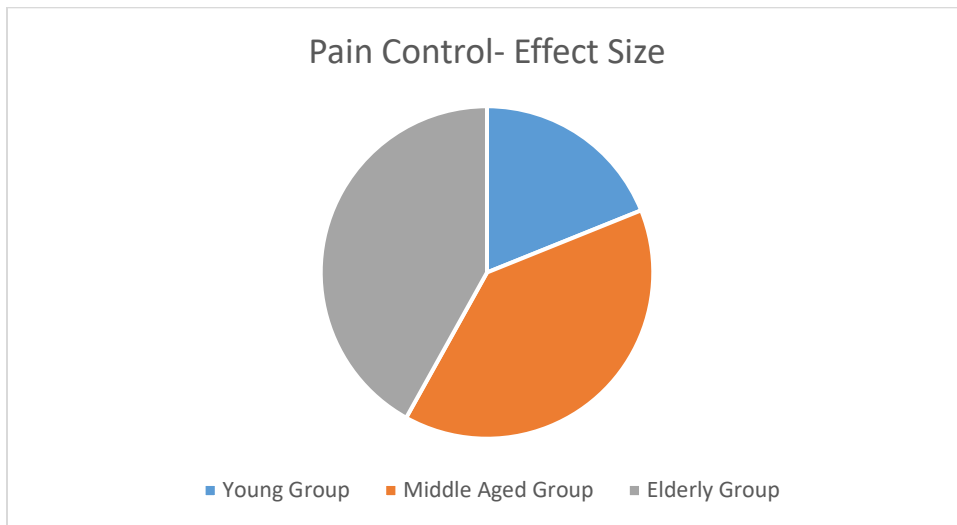
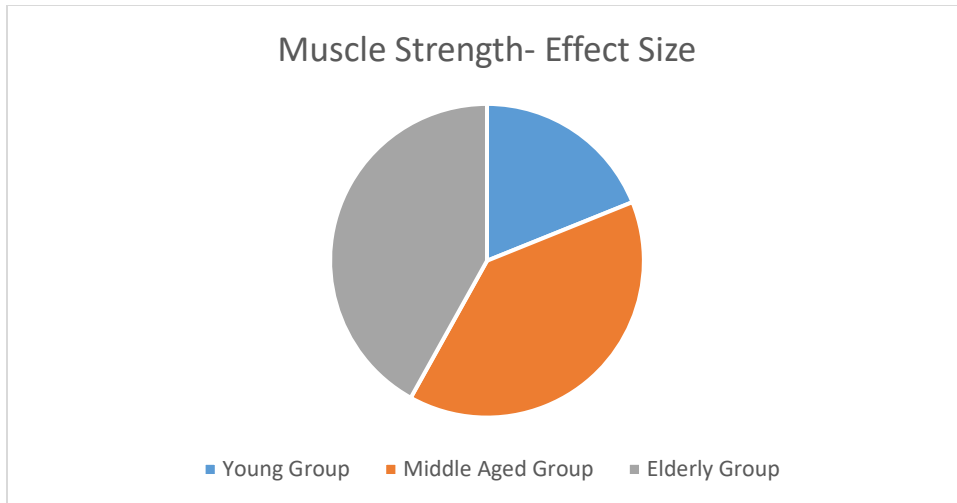


Kinesio taping can be a very effective method for managing pain and postural instability in Covid patients. This approach has long been used to treat a range of disorders in which pain is a prominent symptom. Taping procedures can aid in the stabilisation of body tissues and the improvement of pain quality.

In January 2019, Seyda Toprak Celenay and Derya Ozer Kaya published a case study in the Journal of Bodywork and Movement Therapies titled "Immediate effects of kinesio taping on pain and postural stability in persons with recurrent low back pain." [9]. On 101 patients with chronic low back pain, kinesio taping was utilised on the paravertebral muscles and sacrum using the muscle and ligament approach. The stability of a person's posture was put to the test. On a scale of 0 to 5, the Oswestry Disability Index was employed to assess pain. Following the application of the treatment, patients reported a significant reduction in discomfort and improved postural stability.

In The Journal of Korean Physical Therapy, So-Jeong Lee, Dongyeop Lee, Ji-Heon Hong, Jae-Ho Yu, Jin-Seop Kim, and Seong-gil Kim published a review study titled "The Effect of Kinesio Taping on Pain, Muscle Strength, and Balance Control Ability by Age Group" [10]. (4 June 2021). The following was discovered after researching 1000 articles for the article.





The effectiveness of Kinesio taping varied depending on the age range of the participants, however it was found to be helpful in increasing balance, muscle strength, and discomfort.

Many more studies on the use of massage and Kinesio Taping to alleviate pain in a range of illnesses have been undertaken. The aetiology of muscular pain (myalgia) in Covid patients can be connected, as can the benefits of massage and kinesio taping on pain relief, meaning that massage and kinesio taping can be used effectively to treat myalgia in Covid patients.

CONCLUSION: Massage and taping are helpful treatments for myalgia in Covid patients.

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