

A critical evaluation of Myofascial Release in Sports therapy.

Introduction

One common soft tissue technique for musculoskeletal physical therapy is Myofascial release (MFR). It's used as a way to improve movement and reduce discomfort, it involves applying constant pressure to areas of underlying fascial constriction. Muscles, bones and organs are protected by fascia, an ongoing connective tissue that helps in both movement and support for structure (Schleip, 2003).

Many therapists include MFR into their treatment plans, and it's often utilised in both clinical and sporting environments. Although being widely used, there is constant debate on how successful it is and the accuracy of its basic mechanisms. While some sources claim that the pressures used are too weak to produce any long lasting structural change, others claim that MFR works by physically 'releasing' tight fascia. As a result, it is important to evaluate the techniques reported advantages as well as the supporting evidence. The implications of MFR, the advantages and drawbacks of the research, and as to whether or not it should be applied in physiotherapy practice will be addressed in this write up.

Reported benefits and effects of Myofascial Release

MFR is mainly used to improve overall function, increase range of motion and decrease pain. These findings are even more important for people with musculoskeletal conditions, as discomfort and stiffness can make daily activities challenging.

One of the positive effects that is more often mentioned is pain relief. According to Aijmsha (2015), after undergoing MFR, patients with chronic lower back pain saw a decrease in their discomfort and level of impairment. As stated by Aijmsha (2014), patients with plantar fasciitis reported less discomfort following treatments, suggesting that MFR might be beneficial for a variety of conditions.

Increased range of motion and flexibility is another frequently discussed benefit. Based on Beardsley and Skarabot (2015), myofascial treatments can improve joint mobility temporarily. These improvements are often seen straight away following treatment, which could be a positive in rehabilitation environments where regaining movement is the main goal.

Moreover, a number of procedures have been suggested to explain how MFR works. These involve boosting blood flow, releasing fascia attachments and stimulating nerve cells that could decrease pain (Schliep, 2003). Furthermore, rather than directly changing tissue structure, Bialosky (2009) suggests that manual therapy methods may have a neurological impact, which means they affect how pain is dealt with.

It's important to recognise that many of these theories are still speculations and lack strong evidence to back them up.

Evidence supporting the effects of Myofascial Release

While it is not always consistent, there is some research to support the application of MFR. In an in-depth analysis of randomised controlled studies, an article by Ajimsha (2015) found that MFR was beneficial for increasing function and reducing pain in a variety of musculoskeletal conditions. This means that MFR might be useful in traditional therapeutic environments, especially for the treatment of chronic pain.

Beardsley and Skarabot (2015) reported that self-myofascial release methods, such as foam rolling, may enhance range of motion without affecting muscular function. This is useful for situations where maintaining strength is crucial, such as sports and health rehabilitation.

Myofascial treatments may additionally impact trigger points by reducing muscle tension and pain sensitivity according to Cagnie (2015). This gives support to the idea that MFR could have an impact on the neuromuscular system.

The short term benefits associated with myofascial treatments have been shown by additional study, especially with regard to flexibility and recovery. According to MacDonald (2013), a single self myofascial release treatment greatly increased joint range of motion without affecting muscle function. This suggests that MFR could be helpful when integrated into a warm up or recovery program.

However, a major disadvantage is that a significant portion of these studies focus on quicker results. When it comes to long term rehabilitation, there is not enough information to figure out if these gains are maintained over a longer period of time.

Critical evaluation of the evidence

Although some positive data, MFR has a number of disadvantages that must be taken into account. The quality of the research is a major issue. Many studies have a small number of participants, which limits how widely the results may be reproduced. In addition, there is a lack of consistency in the use of MFR, with differences in treatment duration, frequency, and technique (Beardsley and Skarabot, 2015). Due to this, analysing findings from different studies is difficult. Furthermore, comparable issues, such as inconsistent methods and differences in therapeutic outcomes, have been identified by systemic studies of manual therapy in general (Gross, 2015).

However, masking creates additional challenges in this kind of study. Participants are usually aware that they are receiving therapy because MFR is a method that is hands on. This increases the chance of placebo effects, where outcomes could be influenced more by expectations than by the actual outcome of treatment. Bialonsky (2009) highlights that factors such as patient beliefs and therapist interactions can have a significant impact on outcomes. Bishop (2015) offers evidence for this, suggesting that therapy outcomes may be influenced by environmental and psychological variables rather than by the specific type of physical technique used.

Similarly doubtful objectives are claimed about mechanical effects of MFR. Chaudrhy (2008) argues that the techniques used during therapy are unlikely to end up in significant structural changes, contradicting the common belief that MFR works by physically 'releasing' fascia. This suggests that the advantages of MFR might have more to do with neurological responses than with real tissue changes. Overall, even though there are some positive findings, the evidence is still too weak to fully support the traditional hypothesis behind the technique.

Evidence disputing the benefits of Myofascial Release

There is data which raises doubts on MFRs efficiency. According to Cagnie (2015), there is very little proof to indicate long term benefits from Myofascial techniques, even though they may offer immediate pain relief. This questions the matter of whether MFR has advantages beyond short term symptom relief.

Furthermore, some studies point out that MFR might not be beneficial to alternative therapies. As stated by a study in 2013 (Krogh), manual therapy techniques often result in outcomes that are similar to the results of other traditional methods. This might imply that MFR is not always a better course of practice.

Non-specific effects are another problem. It becomes difficult to argue for MFR as a special or important treatment if patients show similar benefits with a placebo or other forms of therapy.

When analysed overall, these results suggest that while MFR might have some advantages, these are likely temporary and not tailored to the method.

Personal evaluation and clinical application

I believe that MFR has an important function in physiotherapy based on the studies I have thoroughly read. However, it is stated multiple times, it is recommended to be used cautiously and not be used aggressively or heavy on clients.

In the initial stages of rehabilitation, when patients experience pain or stiffness, I would think about incorporating an MFR into a more thorough treatment plan. It could reduce symptoms and make it less difficult for people to take part in other forms of treatment, such as exercise.

Therefore, I wouldn't base treatment mainly on MFR. Exercise and training are examples of active methods that tend to be more effective for long term results. Overall reliance on passive techniques such as MFR might prevent overall progress and decrease patient independence.

When discussing MFR to patients, I feel that it's important to be realistic. It might be better to suggest that it may help with short term pain relief and relaxation rather than describing it as a way of 'releasing fascia'.

I agree that an MFT can still be used by other therapists, but it is not supposed to take over the role of evidence based practice. Treatment options should be tailored for each patient, based on the latest recommendations in research.

Conclusion

To conclude, in physiotherapy, Myofascial Release is an often used approach that has been shown to increase range of movement and reduce discomfort in the short term. However, there are several types of research limitations and a range of general quality of research. There isn't much proof to support the hypothesis that MFR works by physically modifying fascia. Rather than structural changes, the effects are more likely to be related to neurophysiological and physiological factors. In addition, there isn't much evidence to back up the long term benefits.

With everything considered, MFR may prove useful as a part of a more comprehensive therapy strategy, but it's not recommended as a main treatment. Long term outcomes will probably be better if active therapy and patient awareness is addressed.

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