Preliminary Results of a Study on the Effects of Painless Deep Tissue Massage on Participants with Fibromyalgia, Chronic Pain Syndrome, and/or Chronic Fatigue Syndrome

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ABSTRACT

Purpose: There have been a variety of studies and anecdotal data indicating that massage can have significant effects, both positive and negative, on fibromyalgia, chronic pain, and chronic fatigue. Over the last 15 years, the investigator has been developing a style of massage that appears consistently beneficial. This study is to test Painless Deep Tissue Massage on participants with difficult prognoses.

Methods: This is a small-scale, long-term, ongoing observational study to determine if Painless Deep Tissue Massage warrants a larger study. Primary outcome measure was the Fibromyalgia Impact Questionnaire (FIQ) total score (score range 0–100, with 0 indicating no impact). The initial 6 participants all had been diagnosed with fibromyalgia for between 3 and 17 years.

Results: Over the course of up to 4 years, 67% of the initial participants completing at least two sets of questionnaires had FIQ scores of less than 40 at some point, indicating good function in normal living conditions. Average initial FIQ was over 60. Substantial improvements were seen for many within 3 months. Other research suggests that a 14% reduction in FIQ is clinically relevant (Bennett et al. 2009).¹ There were 12 in the initial group. Two dropped out because of other health issues (brain tumor / liver problems). One dropped out for unknown reasons after 9 massages. Of the remaining 9 participants, 8 attained FIQ scores of less than 40, or 89%. And the ninth participant continues massages to enable her to continue to function adequately.

67% of the initial participants had reverses over the course of 2 years, which are due to other factors than myofascial dysfunction in their lives. So long as the other factors exist, massage can support better function, including going back to school or work. When massage is stopped, function returns to a poor level. The degradation in function is reversible by restarting massages. In addition, so long as massage is maintained at a maintenance level, participants were able to reduce or eliminate pain medications.

Participants who were able to change their behavior patterns were able to eliminate or dramatically reduce their need of maintenance massages. One massage every 6+ weeks is reasonable for anyone living an active life. The clients who have made the most progress are those who can calm their minds, maintain a reasonable level of discipline around food and drink, and have a stable support system. (See Appendix A, p20 and Appendix B, p21.)

Conclusions: Painless Deep Tissue Massage warrants a larger-scale test, as part of a multi-disciplinary program for fibromyalgia, chronic pain, and chronic fatigue. Painless Deep Tissue Massage appears to be the most effective way to reverse the physical-function degradations, shown by the FIQ. Without effective additional support, many participants will need continuing high-level massage support. See Appendix A for our recommendations as to possible support.

A possible complementary program would be "Treat-to-target strategy for fibromyalgia²". Also appropriate, the German S3 Guidelines for Fibromyalgia Syndrome.³ To the author's knowledge, there is no study that shows such a significant improvement in participants FIQ scores nor is there any study over such a long time period.

Keywords: massage, fibromyalgia, chronic pain, chronic fatigue, long-term

 ¹ BENNETT, R. M., BUSHMAKIN, A. G., CAPPELLERI, J. C., ZLATEVA, G.& SADOSKY, A. B. (2009). Minimal clinically important difference in the fibromyalgia impact questionnaires. The Journal of Rheumatology, 36.6, 1304–11.
² Hauser W, Clauw DJ, Fitzcharles MA. Treat-to-target strategy for fibromyalgia: Opening the dialogue: Treat to target for fibromyalgia, Arthritis Care & Research, DOI 10.1002/acr.22970

³ T. Dreher, W. Häuser, M. Schiltenwolf, Fibromyalgia Syndrome - Updated S3 Guidelines, Z Orthop Unfall 2013; 151: 1–7

Graphs:

The first 4 graphs are from self-reported levels of Emotional Distress, Sleep Problems, Current Pain, and Pain after the Massage. Clients provide this information before and after every massage.

The fifth graph shows the results of the FIQ questionnaire, up to 400 days. The sixth shows results of the FIQ up to 800 days. The FIQ seems to best relate to the clients' functional capabilities - the higher the numbers, the less they are able to do. When clients have reverses, there are always real, reasonable causes: car accident, a long vacation without maintenance, return to stressful work, emotional breaks with family, health issues, etc.

Subsequent charts show the results from the Beck Anxiety Inventory, HAD (Hospital Anxiety and Depression scale), PCLS (Posttraumatic Stress Disorder Checklist), SF-36 Short-form Health Survey, and more recently, QDSA (Questionnaire de Saint Antoine), and PANAS (Positive and Negative Affect Schedule).

<u>Analysis:</u>

The author expected to see pain levels reduce, then function (as measured by FIQ) improve, if massage even had any effect.

This is not what appears to happen.

Self-reported pain levels take about 6 months to reach a lower level.

During this interval, self-reported Emotional Distress and Sleep Problems vary, often increasing. Function improves over the course of 3-4 months, with 2 massages per week, so long as there is no adverse event, to a nearly normal level, as shown by the FIQ. (The FIQ chart is notated to show adverse external events.)

Anxiety, per Beck, HAD-Anxiety, generally decreases.

Depression, per HAD-Depression, generally remains low or decreases, so long as there is no adverse event.

PCLS (Post-Tramautic Stress) also has a general downward trend, sometimes very significant.

SF36-Physical Functioning has a general upward trend over the long-term.

SF36-Role Functioning is variable.

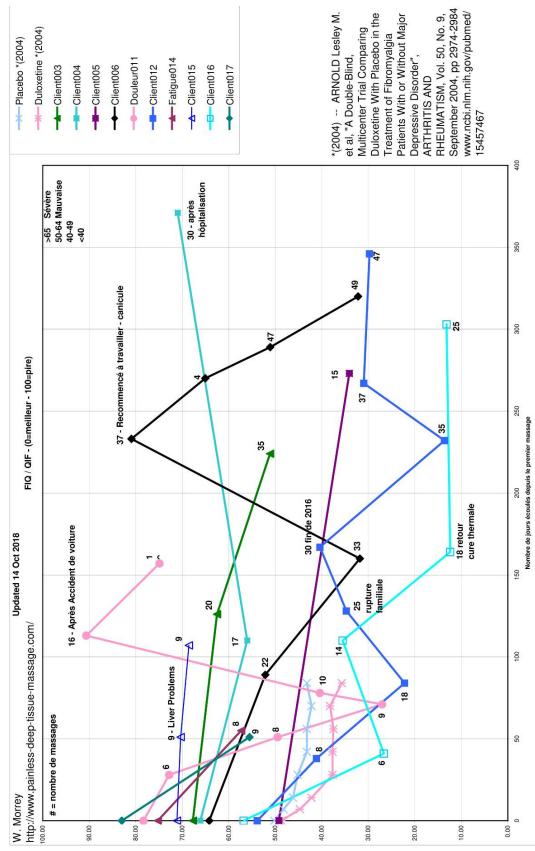
The rest of the SF36 results typically show a moderate improvement over the long-term.

QDSA and PANAS are still too short-term to determine what they show.

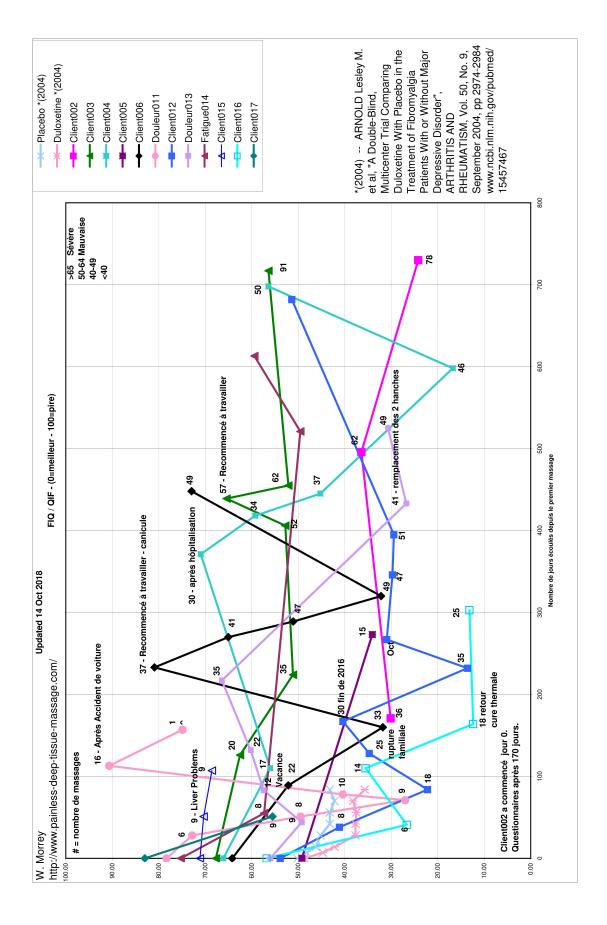
To the author's knowledge, there has never been:

1) Any study that shows this kind of improvement to FIQ.

2) Any study extending over this kind of time interval.



Client003 at 377 days before starting the study had a FIQ of 71.11 (vs 67.73 @ start) Client004 at 268 days before starting the study had a FIQ of 41.84 (vs 66.12 @ start) Client005 at 379 days before starting the study had a FIQ of 43.58 (vs 49.22 @ start) Client006 at 467 days before starting the study had a FIQ of 65.34 (vs 64.20 @ start) Douleur013 at 1112 days before starting the study had a FIQ of 54.81 (vs 56.01 @ start) Fatigue014 at 669 days before starting the study had a FIQ of 55.82 (vs 75.26 @ start)



Appendix A

Fibromyalgia / Chronic Pain Syndrome – Causes and Perpetuating Factors – my opinion W. Morrey 30 March 2019

- 1) Muscular damage initial see article "Massage for Women's Pain"⁵
- 2) Bad Habits of Thought
- 3) Bad Habits of Action
- 4) Bad Diet
- 5) Bad Sleep
- 6) Stressful situations and people
- 7) Manageable work
- 8) Overwhelming, irrational fears
- 9) Fear of pain

2) Bad Habits of Thought:

- a) Belief in "No Pain, No Gain" (or "it is necessary to suffer") is not helpful.
- b) Trying to fix problems for other people. Taking too much on ourselves.
- c) We all need to take responsibility for our own health and not rely too much on doctors they do not live in our bodies.
- d) Stress is a choice. There are always stressful situations we can choose to be stressed or we can just do what we can do (and learn what we cannot do).
- e) Fear of being touched in a therapeutic way.
- f) Rigidity / inflexibility
- g) Inability to calm their thoughts

3) Bad Habits of Action

- a) Some exercise regularly is better than none park at the far end of the parking lot get off the bus a stop early and walk.
- b) Too much and / or too infrequent exercise contributes to muscular damage.
- c) Minimize medications.

4) Bad Diet

- a) Eliminate ALL artificial sugars and fats.
- b) Keep sugar and salt use low.
- c) Avoid processed foods READ THE LABELS too many chemicals? Don't eat it!!
- d) Eat lots of fresh, colorful produce.
- e) Avoid excessive meat / fish consumption, but consume protein in balance. Avoid cheaply-produced meats too many hormones / antibiotics / other chemicals in the feed.
- f) Eat smaller portions of higher-quality foods actually costs less and is more satisfying in the long run.
- g) Maintain a diversified and balanced nutrition.

5) Bad Sleep

a) Try recommendations for insomnia - https://www.painscience.com/articles/insomnia.php

- 6) Stressful situations and people
 - a) Work to reduce these situations
 - b) Learn how to put an emotional distance when you do have to put up with them.

7) Manageable work

- a) All of my clients who are not retired want to get back to work. Problems arise if they must go back to work before they are ready or if they must go back to a too-stressful job.
- b) Administrative support should be designed to HELP clients return to work as it becomes possible for them to do so, without excessive paperwork and effective support to help them complete any necessary paperwork.
- 8) Overwhelming, irrational fears.
- 9) Fear of pain \rightarrow overuse of opioids.

⁵ http://www.painless-deep-tissue-massage.com/articles/003a.html

<u>Appendix B</u>

Massage for Women's Pain

Walt Morrey, originally published in "Focus on the Coast", Wilmington, NC, 2006

There are a number of conditions that can affect a woman's health. For instance, Fibromyalgia and Chronic Pain Syndrome are much more common in women than in men. These conditions can start a chain reaction leading to additional health issues. I believe, however, that with patience, perseverance, and gentleness, their progressive nature can be reversed.

Here is an example of one composite experience --- You start off dealing with stress continuously; whether you have very high expectations of yourself, problems in your family life, or other long-term stress-causing situations. You hold your muscles tight all the time – they never can fully rest. Your constant stress has set you up for injury. Something happens – you move wrong doing normal things, have an accident, or cause other damage to your body. A muscle is injured, but you keep going, not taking time to soothe or treat the injury. Other muscles take up the slack and you keep going, soon forgetting the injury, and causing your body to become out of balance. Your other muscles are under more tension to compensate. More injuries. You start to hurt – just a little at first, then the pain becomes constant. You see a doctor for pain. Medication helps. Then it's not enough. You get more injuries. You get more and stronger pain medication. The pain medication starts interfering with the clarity of your thinking. You hurt. You take more medication. You keep getting more pain. Life isn't yours any more. You live in a fog. You get depressed. Antidepressants. You live in a bottle. You can no longer do your job. You become dependent on others to care for you, but you don't care because you hurt so much; and you can't face life without your medications – you're addicted.

Although this paints a pretty awful picture, it happens far too often. The pain is REAL, the depression is REAL and REASONABLE, and it is a downward spiral that will continue unless you start to make some changes.

Reversing the direction is clearly not going to be easy or quick; it took too long to get here and there are too many pieces to work on.

To begin, you need to set goals: 1) rid yourself of the addiction to pain killers 2) deal with your depression 3) work to eliminate stress triggers 4) eliminate the pain.

This process will not be accomplished overnight, and you cannot attempt these goals all at once. You will likely need the medications to deal with the pain and depression NOW. Dealing with the stress will not be beneficial at this point because your thinking is foggy. To get closer to dealing with stress and the condition as a whole, patients might consider the benefits of massage.

The right kind of massage can help reduce the pain, but the wrong kind can make it MUCH worse. How can you determine what is the right kind of massage for you? In this case, the massage will eventually have to get very deep to clear the old injured areas in your muscles. Although deep, this massage has to be extremely gentle to be beneficial as well as tolerable. Many old injured areas have turned into "Trigger Points", and these can cause pain to appear far from the injured area, frequently in joints or bony areas. Massaging where the pain appears can often do nothing and your therapist must be able to find and gently clear the Trigger Points. While ultimately beneficial, this is a slow process and requires patience. At no point should massage be painful – this would demonstrate that additional injury is being caused – inform your therapist as soon as this happens for them to correct.

Doing normal deep tissue massage is contraindicated when clients are on heavy dosages of pain medication, since the client is unable to give accurate feedback to the therapist and the therapist can easily over-treat, causing injury and more Trigger Points to appear. Initial visits must be extremely gentle, though progress will still occur. At this stage, the goal is to gradually reduce pain medication and have frequent massages (up to 2 per week). Massage is not enough, so find a physician who will help with this type of plan. Do NOT go "Cold Turkey" on your medications – the pain and withdrawal will likely cause a major set-back.

Next, as your thinking clears, find a good therapist to help modify your behaviors and/or thought patterns that created your stress. Continue with massage and the reduction of pain killers, as appropriate for your pain level. Since some will need to deal with withdrawal now, switch to less-addictive pain medication, all with your physician's assistance. This is your first step toward healing.