

Can Body Therapy Support Treatment For Chronic Lung Disease?

WHAT IS BODY THERAPY?

Body therapy involves manual therapy, or the application of force to the soft tissue or joints of the body. <u>Massage</u> is a well-known bodywork technique that involves kneading, rubbing and squeezing soft tissues of the body to promote wellness and/or relaxation. Spinal manipulation is another bodywork technique, often used in <u>chiropractic</u> to restore alignment, mobility and optimal functioning to the joints in the spine.





Our Purpose

Our purpose is to be a global facilitator of health and wellness through access, education and advancement of Traditional & Complementary Medicine (T&CM). The World Health Organization (WHO) advises that lifestyle-related diseases (or non-communicable diseases) are responsible for more than 70% of deaths worldwide each year.

Knowledge represents empowerment. By sharing this evidence-based, peer-reviewed research, we aim to support everyday people to take ownership of their wellness, by making informed decisions and choices in conjunction with their health professional.

How This Study Could Help You Manage Chronic Lung Disease

Statistics published by the WHO indicate that chronic obstructive pulmonary disease (COPD) is responsible for approximately 6% of all deaths globally each year. This study explores how soft-tissue massage and spinal manipulation might improve lung function for people suffering from COPD, and is titled:

MEDIUM TERM EFFECTS OF INCLUDING MANUAL THERAPY IN A PULMONARY REHABILITATION PROGRAM FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD): A RANDOMIZED CONTROLLED PILOT TRIAL.

You can read the full study here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4984811/



Why Is This Study Important?

A major consequence of COPD is shortness of breath, also described by the medical term 'dyspnoea'. This symptom is made worse by physical activity, so it limits the ability of people suffering from COPD to exercise. The disease is also associated with cardiac deconditioning (the heart becoming less efficient at coping with increased demands) and other problems related to lack of exercise.

Along with pharmaceutical medication, pulmonary rehabilitation is a common therapeutic approach. It includes education, exercise training and other interventions, and evidence suggests it is a reliable way to reduce the symptoms of COPD. However, research does not show that it is associated with "clinically significant changes" in lung function as measured by <u>forced vital capacity (FVC)</u>. This is a test that indicates how much air a person can forcibly blow out after inhaling as deeply as possible.

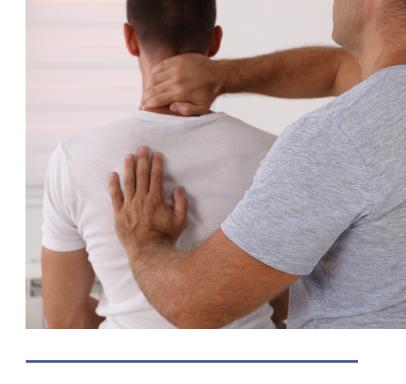
Part of the reason why people with COPD suffer from dyspnoea is because of how the disease affects the muscles and joints around the ribcage. This is known as chest wall rigidity, or CWR, and it is believed to develop gradually as COPD forces people to make more effort in order to breathe. Finding ways to reduce chest wall rigidity may improve people's ability to exercise, which in turn may increase the effectiveness of pulmonary rehabilitation.

What Does This Mean For My Wellness?

Although the precise mechanism of how manual therapy may improve lung function is not yet understood, the authors of this study speculated that a "synergistic effect resulting from the combination of interventions" might be involved. They quoted previous research hypothesising that the efficiency of how the ribs and chest muscles work together may have a major influence over how effectively the lungs inflate and deflate.

For this reason, manual therapy that directly treats both the muscles and joints around the ribcage may help reduce chest wall rigidity in a specific way which improves the effects of pulmonary rehabilitation. By temporarily alleviating the effects of muscle strain caused by breathing difficulties, the researchers suggested manual therapy may stimulate the repair of muscles used for breathing. This in turn could allow a person suffering from COPD to obtain greater benefits from exercise training.

The authors noted that the improvements associated with manual therapy twice a week justified further research into the subject. They speculated that increasing the frequency of the therapy (along with conventional rehabilitation) might result in a "different level of synergy between the interventions".



How Does This Relate to Massage and Spinal Manipulation?

Breathing difficulty caused by COPD leads to an abnormal use of the muscles surrounding the ribcage, and this is believed to be one of the reasons for chest wall rigidity. The type of manipulation used in this study focused the use of both soft tissue massage and spinal manipulation on several joints at a time, including joints between the ribs and the spine (the costovertebral joints). The authors of this study hypothesised that soft-tissue massage techniques applied directly on the chest wall could improve the function of relevant muscles, while spinal manipulation could mobilise the joints of the spine and ribcage.

In 2016, researchers affiliated with Macquarie University in Australia published the results of a pilot trial exploring the effects of combining soft-tissue massage and spinal manipulation with pulmonary rehabilitation for COPD.

The 33 enlisted participants were randomly allocated to three groups, with 25 completing all interventions and follow up measurements. The first group received soft tissue massage in addition to pulmonary rehabilitation, the second underwent spinal manipulation as well as the other two interventions, while the control group received pulmonary rehabilitation only.





Key Findings About the Effects of Body Therapy on Chronic Lung Disease

- The results suggested that eight weeks of manual therapy that involved both soft tissue massage and spinal manipulation, performed twice a week in addition to a conventional pulmonary rehabilitation program, was associated with an improvement in lung function as measured by FVC. This improvement persisted for 12 weeks after the manual therapy finished. The authors noted that this was a unique finding given conventional treatment was "generally not recognised for delivering clinically meaningful improvements" in lung function.
- The only adverse effects reported were mild, and involved muscle soreness experienced by two participants that resolved in two days. This suggests manual therapy may be a safe way of supporting conventional treatment for COPD.
- Possible improvements in exercise capability were measured by how far participants could walk within six minutes. Although there were differences between the individual groups, the changes were not statistically significant when the intervention groups were compared with the control group.

Disclaimer: The above does not constitute medical advice, and as with any exercise or wellness program, please consult your medical professional before commencing massage therapy or spinal manipulation.

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Quoted from journal description

References

Massage | souladvisor.com

Chiropractic | souladvisor.com

Chronic respiratory diseases | World Health Organization

Medium term effects of including manual therapy in a pulmonary rehabilitation program for

chronic obstructive pulmonary disease (COPD) | Journal of Manual & Manipulative Therapy

What Is Forced Vital Capacity (FVC)? | verywellhealth.com

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