I Stand Corrected!
Cognitive Muscular Therapy (CMT) for Chronic Low Back Pain

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Background

Chronic low back pain is a leading cause of disability in the UK. Evidence suggests that people with chronic low back pain (LBP) demonstrate muscle overactivity during functional tasks when compared to healthy controls. This increased activity of the low back and trunk muscles is associated with increased sensitivity to pain and has been shown to place the spine under unnecessary strain. People with chronic LBP exhibit alterations in functional movement patterns and postures when compared to healthy people. People with LBP adapt how they perform tasks such as bending and lifting, and this may be due to reduced movement of the spine due to muscle overactivity. Over a prolonged period, these maladaptive movement patterns will increase pain.

Psychosocial physiotherapy techniques for LBP are gaining widespread acceptance. However, conventional approaches often involve strengthening exercises, and are not specifically aimed at reducing muscle overactivity, posture or movement re-education. Therefore, there is a need for research into interventions for chronic LBP which integrate psychologically informed practice with training to reduce muscle overactivity.

The CMT Journey

CMT is a psychologically informed, holistic physiotherapy treatment program delivered over 8 weeks. Paraspinal surface EMG data, the Rowland Morris low back pain and disability questionnaire (RMQ), the Tampa scale for Kinesiophobia and the Pain Catastrophising Scale were completed pre and post treatment. The program is split into the following 5 components:

- Understanding Low Back Pain
- General Relaxation
- Postural Deconstruction
- Contextual Triggers and Movement Initiation
- Functional Movement Retraining

Results

Other Outcomes:

- 77% reduction in low back pain related disability (RMQ)
- 23.9% reduction in kinesiophobia
- 66.6% reduction in catastrophising

Participant Feedback

- Revolutionised the way I think about daily activities
- Much more effective than current physio
- Revolutionary!
- Thanks to CMT, I am now totally pain free
- I didn’t think this level of recovery was possible
- Day to day improvement in my back pain
- Much more effective than current physio
- A life changing treatment

Treatment Model

What’s next for CMT?

A further research application has been submitted requesting funding from ‘research for patient benefit’ to continue to development of CMT for low back pain. The next study will:

- Refine the CMT protocol and online resources
- Develop a training programme to train other therapists
- Recruit and train 5 musculoskeletal therapists and gather data from a further 30 participants
- Hold interviews with therapists to gain feedback and develop training programme further