

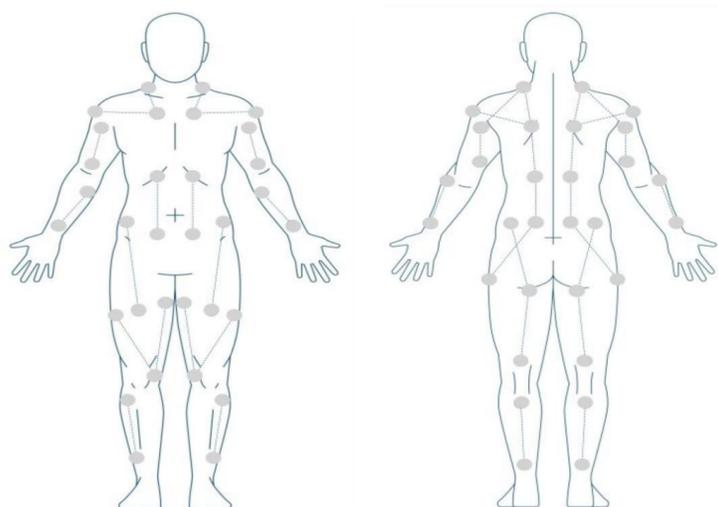
# A Case Study to Assess the Effects of an Electrical Stimulation Suit on Pain and Sleep pattern of an Individual diagnosed with Chronic Fatigue Syndrome/ME.



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**Background:** The Mollii method was initially an innovative approach for non-invasive electrical stimulation to reduce spasticity and improve motor function in individuals with a lesion in the central nervous system. Anecdotal findings suggested that this approach possibly could benefit people with pain syndromes, chronic fatigue and disturbed sleeping patterns. This leading to start investigating if the Mollii suit may be an effective treatment for these patient groups.

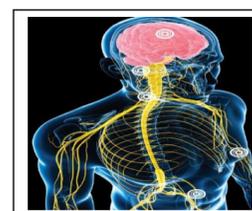
**Aim:** To explore whether a daily hours use for thirty straight days of the Mollii Suit would improve measures for Pain, Sleep and Energy levels.



**How it works:** The Mollii suit provides a sensory-level transcutaneous electrostimulation to all 'selected' muscle groups across the body via the 58 electrodes built in to the jacket and trousers as can be seen left. Following individual subject assessment, the small control unit is programmed by the clinical specialist and the suit is worn for 60 minute sessions to observe possible effects. The stimulation is theorized to induce pain inhibiting mechanisms in the CNS as well as affecting hormone levels positively such as Serotonine and Dopamine. The modulating effects on the nervous system are thought to occur through the activation of sensory afferent pathways which enter and are processed in the spinal cord and higher central neural circuitry.

Results	Pre Mollii	Post Mollii
MAF (130 max score)	110	100
FSS (63 max score)	61	51
VAS (10 max score)	7,5	3,5
TDAH	2,5	7
REM/Deep Sleep	2,5	5
How often have you been fatigued over the past week? (1-4)	4	3
To what degree has your fatigue changed during the past week? (1-4)	4	3

**Outcome Measures:** Sleep monitoring measuring REM and Deep Sleep, Self Assessed Visual Analogue Scale for Pain, Fatigue Severity Scale, Multidimensional Assessment of Fatigue and Timed Daily Active Hours.



**Results:** As can be seen in the table, there were significant observable as well as subjective changes in the patients evaluation. Most notable in Awake time and REM/Deep sleep monitoring.

**Conclusion:** A single hour of wearing the Mollii suit for thirty straight days, after being programmed by a trained therapist, clearly demonstrated subjective improvements in the Self Assessment Evaluation forms as well as objective changes in the Sleep Monitoring and Total Daily Active Hours. Other effects that were noted by C's family were: - increased interaction with friends and family, decreased agitation and increased planning ahead. C is renting a Mollii suit with continued use to see if the above achieved results continues to improve.