

# MASSAGE THERAPY FOR ESSENTIAL TREMOR: QUIETING THE MIND

## INTRODUCTION

Essential tremor (ET) is a neurological disorder causing rhythmical shaking of part of the body. The condition is known to have an inheritable tendency and can present in more than one family member, known as familial tremor. Treatment of the disorder is commonly by way of prescription medication. ET is progressive and in its mildest form can be sensed and/or observed when performing simple motor skills or activities of daily living. Stress and anxiety is a major contributor to the intensification of this tremor.

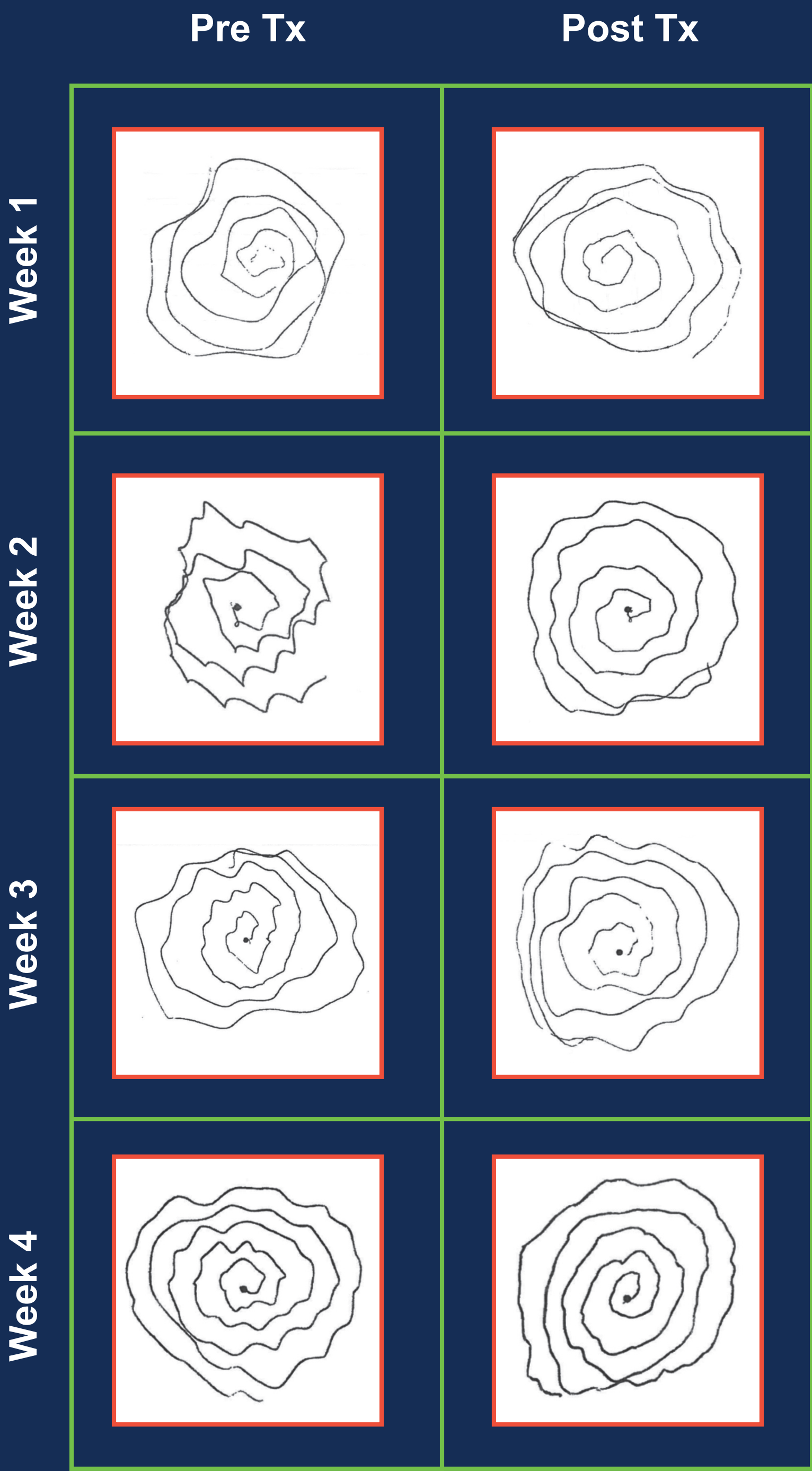
## OBJECTIVE

Evaluate the effects of massage therapy on the severity of ET using an activity-based rating scale pre- and post-treatment.

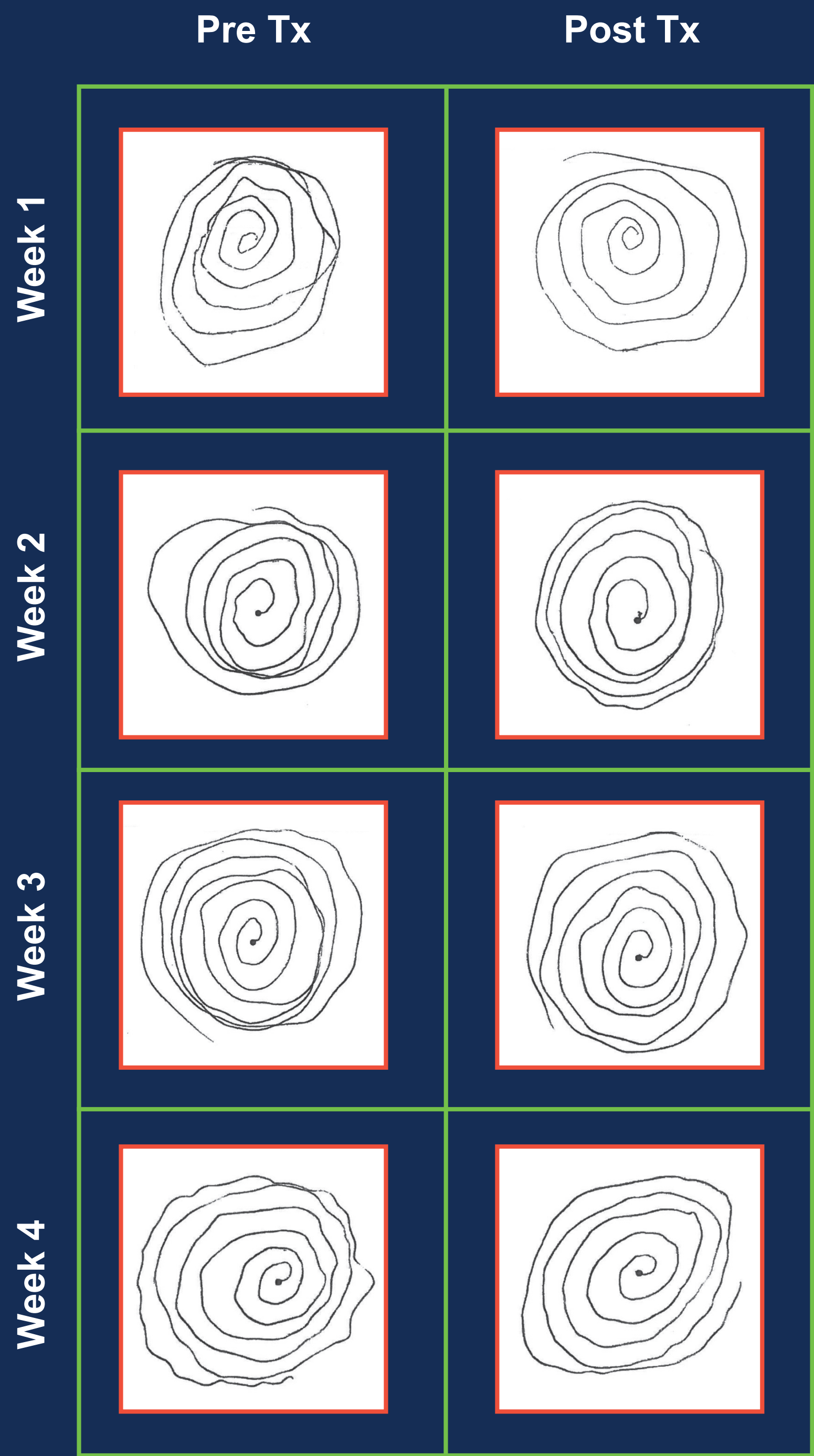
## HYPOTHESIS

Consecutive applications of massage therapy will decrease tremor intensity in clients with ET by provoking an involuntary state of relaxation and through the treatment of hypertonic musculature over-stimulated by repetitive movement.

### Archimedes Spiral Drawn with LEFT Hand



### Archimedes Spiral Drawn with RIGHT Hand



NOTE: Drawing executed without leaning hand or arm on table.

### Bilateral Tremor Scoring by Action

	Week 1		Week 2		Week 3		Week 4	
	Pre Tx	Post Tx	Pre Tx	Post Tx	Pre Tx	Post Tx	Pre Tx	Post Tx
Finger to nose	6.0	3.0	6.0	3.5	3.0	2.0	5.0	3.5
Pouring water	3.0	2.0	3.0	1.5	2.5	1.0	4.0	3.5
Using a spoon	6.0	3.5	6.0	3.5	4.0	2.5	5.0	2.5
Drinking from cup	8.0	5.0	8.0	5.0	4.0	3.5	6.0	4.0
Action Total	23.0	13.5	23.0	14.5	13.5	9.0	20.0	13.5

NOTE: Higher scores indicate a more severe tremor. The range for action tremor is 0-32.

## ESSENTIAL TREMOR

## RESULTS

Tremor intensity decreased after each session; demonstrated by improved fine motor skills. Scoring on the WHIGET tremor rating scale consistently decreased post treatment. The client also reported an increased functionality in cervical range, which was documented during the first and last visits.

## CONCLUSION

The results suggest that tremors, symptomatic to ET, can be eased through initiatives that encourage a parasympathetic response. Massage therapy has shown to be a valuable method of treatment for ET. Tremor severity can present in an irregular pattern due to subjective individual triggers; therefore, further controlled research is required to lessen the variability between subjects and to validate these findings.

The study period included five consecutive weekly sessions. The subject, a 63-year-old female, indicated her hands and head as the primary areas affected by ET. The treatment aim was to reduce sympathetic nervous system firing; therefore, the massage techniques implemented were relaxation-based. Methods included Swedish massage, hydrotherapy, myofascial release, diaphragmatic breathing, remedial exercise education and affirmative

## METHODS

symptom management recommendations. Drawings of an Archimedes spiral for comparison pre- and post-treatment provided an objective, visual representation of tremor intensity affecting fine motor control. Goniometric measurements were taken to mark changes in cervical range of motion.

NICOLE RIOU, RMT

Grant MacEwan University | [rioun@mymail.macewan.ca](mailto:rioun@mymail.macewan.ca)  
Edmonton, Alberta, Canada



MacEwan  
Massage Therapy