



The Efficacy of Meditation for the Treatment of Chronic Pruritus: A Pilot Trial

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Introduction:

- Studies have demonstrated a significant impact of chronic pruritus on quality of life and have found it to be as debilitating as chronic pain¹
- Meditation has been shown to deactivate areas of the brain stimulated by chronic itch and stress and to decrease inflammatory markers²
- Therefore, meditation may decrease the activation of the neuro-immuno-cutaneous-endocrine network and may provide coping strategies to improve quality of life
- No studies to date have studied the use of meditation as an adjunctive treatment for chronic pruritus

Objectives:

- To evaluate the feasibility of subjects with chronic pruritus to practice meditation
- To assess the impact of meditation on the severity of chronic pruritus and its effect on quality of life

Methods:

- 10 adult (≥18 years) subjects with chronic pruritus (>6 weeks) who had not practiced meditation in the previous year were recruited from Emory Dermatology Clinics
- Subjects were enrolled in an 8-week Cognitive Based Compassion Training (CBCT) meditation course taught by the Emory-Tibet partnership
- Subjects completed validated questionnaires to assess severity of their pruritus (Visual Analog Scale, VAS) and characteristics of their pruritus (ItchyQoL³) before and after completion of the 8-week course

Data Analysis:

- Spearman's correlation coefficient was used to determine the correlation between the two outcome measures (VAS and ItchyQoL) and class attendance, as well as practice hours
- Kruskal-Wallis tests were used to assess the association between the two outcome measures (VAS and ItchyQoL) and class attendance, as well as practice hours

Table 1: Demographics and descriptive statistics

	Overall (N=7)	Completed >75% classes (N=4)	Did not complete >75% classes (N=3)
Mean age (SD) years	62.4 (10.0)	68.3 (8.1)	54.7 (6.7)
Male (N, %)	2 (29%)	2 (50%)	0
Mean baseline VAS Itch Severity (SD)	5.0 (2.8)	4.25 (1.7)	6 (2.4)
Mean baseline ItchyQoL scores (SD, range)	3.7 (0.74, 2.8-4.7)	3.6 (0.79, 3.0-4.7)	3.7 (0.83, 2.8-4.5)
% practiced average one hour per week	86%	100%	50%
Mean (SD, range) hours practiced in 8 week session	10.6 (6.6, 0-20.5)	12.7 (5.6, 7-20.5)	5.5 (7.8, 0-11)
Mean change in VAS severity (SD)	-0.6 (3.0)*	-1.1 (3.0)	2(-)**
Mean change in ItchyQoL score (SD)	0.5 (0.3)*	0.3 (0.2) n=4	0.8(0.3) n=2
*based on 6 subjects due to missing data; **Only one subject in the group provided exit scores, thus no standard deviation possible.			

Results:

- Three subjects dropped out prior to consent due to flare of other medical conditions or unpredicted increased personal commitments
- 4/7 subjects enrolled completed the course and attended >75% of classes. Three subjects attended all 8 classes
- One class was missed due to a skin flare; the remaining classes were missed due to personal or work commitments
- Overall there was a non-significant worsening of self-reported severity of pruritus, but there was statistically significant improvement in VAS in the subjects that attended 100% of classes (p=0.0495)
- All subjects reported improvement in their quality of life (average 0.5 points)
- Improvement in ItchyQoL was significantly correlated with completion of both 75% of classes (r= 0.83, p=0.04) and all 8 classes (r=0.87, p=0.02)
- There was a high correlation between the total hours of practice and classes attended (r=0.82, p=0.02)

Conclusions:

- The sensation of itch did not interfere with subject's ability to meditate. Importantly, only one class was missed due to a skin flare.
- The small number of subjects limits extensive analyses, but practicing meditation appeared to decrease the emotional burden of pruritus. This impact was more pronounced with higher attendance.
- The impact of meditation on itch severity trended towards significance and may require longer practice duration before effects are sustained.
- Exit interviews indicated that subjects noticed an improvement of their quality of sleep and their ability to cope with stress and relationships. Subjects also noted that they were able to more quickly stop the urge to scratch during an itch-scratch cycle.

References:

- ¹Kini, SP et al.. The impact of pruritus on quality of life: the skin equivalent of pain. Archives of dermatology 2011;147(10):1153-1156.
²Zeidan et al. Brain mechanisms supporting the modulation of pain by mindfulness meditation. The Journal of neuroscience 2011;31(14):5540-5548
³Desai, NS., et al. (2008). "A pilot quality-of-life instrument for pruritus." Journal of the American Academy of Dermatology 59(2): 234-244.