

# Title: The Role of Massage Therapy in Management of Chronic Pain In Children: A Pilot Analysis

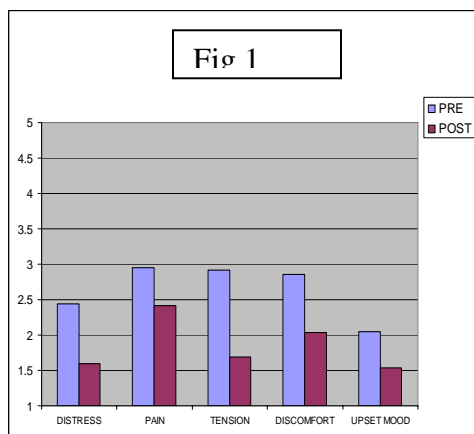
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**AIM:** Chronic pain in children and adolescents can lead to school absenteeism and loss of self-esteem. Despite major medical advances, management of these patients may be complex. The use of integrative medicine may serve as an adjunct to medical management. An integrative medicine initiative in our institution has provided us with the ability to offer multiple modalities including touch-healing, massage therapy and acupuncture for our patients. The results of the pilot data obtained during this initiative were analyzed to elucidate the role of massage therapy in decreasing pain symptoms in children and adolescents presenting to a chronic pain clinic.

**METHODS:** After IRB approval was obtained, patients who presented to the chronic pain treatment center were offered massage therapy by a licensed massage therapist (RK) as an adjunct to pain management methods provided by us in the clinic. Patients were asked to rate their levels of distress, pain, tension, discomfort and upset mood on a scale of 1 – 5 (e.g., for ‘distress’ 1=very calm; 5=very distressed). All data was prospectively collected and were recorded on an Excel database. Paired t-tests were used to compare the pre-massage and post-massage ratings and probability values were corrected for multiple comparisons by using the Bonferroni procedure.

**RESULTS:** Twenty nine patients participated in the study. The mean age of the patients was 13.89 years (range 9 to 19 years). Chronic pain diagnoses included headaches (n=7 ); peripheral neuropathy (n=1); abdominal pain (n=3); back pain (n=6); ear pain (n=1); CRPS type 1 (n=5); fibromyalgia (n=1); patellofemoral syndrome (n=1); ilioinguinal neuralgia (n=1); joint arthralgia (n=2); sickle cell disease related chronic pain (n=1). Massage therapy methods included included compression strokes, petrissage, tapotement, effleurage, and trigger point therapy. After massage therapy levels of discomfort, tension, and mood of these patients significantly improved when compared to their scores prior to therapy. (Fig- 1)



**CONCLUSION:** Reductions in ratings of all five categories of symptoms were highly significant. These pilot data suggest that massage therapy may be very effective in reducing ratings of distress, pain,

tension, discomfort and upset mood in outpatient pediatric pain clinic patients. Further controlled studies are needed to confirm these findings.