Pilot trial examining the safety and efficacy of therapeutic touch in premature infants

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Full Title: A double-blind randomized controlled pilot trial examining the safety and efficacy of therapeutic touch in premature infants

PURPOSE: To explore the hypothesis that nontouch therapy such as therapeutic touch (TT) reduces stress to a clinically important degree and is safe to use in preterm infants. DESIGN: A pilot randomized, double-blind, controlled trial. SUBJECTS: Two groups of 10 infants were enrolled and randomly assigned to treatment or nontreatment groups. Gestational age was less than 29 weeks. Demographic descriptions of the 2 groups were statistically similar. METHODS: The observer and staff were blinded to assignment; the TT practitioner was blinded to observed measurements. Each infant received either TT or no therapeutic touch (NTT) for 5 minutes on 3 consecutive days at the same time of day, behind a curtain. Heart period variability (HPV) was measured 5 minutes before, during, and after the treatment phase. RESULTS: Examination of the parameters of oxygen saturation and episodes of apnea demonstrated no increase in adverse events in TT group compared with NTT group. Repeated-measures multivariate analysis of variance on HPV revealed differences in the interaction of group assignment with low-frequency, high-frequency, and low-to-high-frequency ratio interaction ($F_{2,143} = 8.076$, $P = .000$) and for group, day, and low-frequency, high-frequency, and low-to-high-frequency ratio ($F_{2,288} = 3.146$, $P = .015$), and in the posttreatment time period ($F_{1,16} = 6.259$, $P = .024$), reflective of greater parasympathetic activity in TT group. CONCLUSION: In this pilot trial, HPV showed an increase for the TT group compared with the NTT group. The study reveals no adverse effects of TT in preterm infants.

Adv Neonatal Care. 2008 Dec;8(6):315-33. Whitley JA, Rich BL. Neonatal Nurseries, McMaster Children's Hospital, Hamilton Health Sciences, Hamilton, Ontario, Canada. julie4453@cogeco.ca