

**Factors that predict which preterm infants benefit most from massage therapy.**

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Ninety-three preterm infants (M gestational age = 30 wks; M birth weight = 1204 g; M ICU duration = 15 days) were randomly assigned to a massage therapy group or a control group once they were considered medically stable. The treatment group (N = 50) received three daily 15-minute massages for 10 days. The massage therapy infants gained significantly more weight per day (32 vs 29 g) than did the control infants. Treatment and control groups were divided into high and low weight gainers based on the average weight gain for the control group. Seventy percent of the massage therapy infants were classified as high weight gainers whereas only 40% of the control infants were classified as high weight gainers. Discriminant function analyses determining the characteristics that distinguished the high from the low weight gainers suggested that the control infants who, before the study, consumed more calories and spent less time in Intermediate care gained more weight. In contrast, for the massage therapy group, the pattern of greater caloric intake and more days in Intermediate care before the study period along with more obstetric complications differentiated the high from the low weight gainers, suggesting that the infants who had experienced more complications before the study benefitted more from the massage therapy. These variables accurately predicted 78% of the infants who benefitted significantly from the massage therapy. Thus, these variables can be used to suggest infants who would benefit most from future massage therapy programs.