The Effect of Infant Massage on Weight Gain in an Extremely Preterm Infant: A Case Report

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INTRODUCTION
• Case report conducted in the Neonatal Intensive Care Unit (NICU)
• Majority of infant massage research focuses on “Very Preterm” infants, which is 28-32 weeks gestational age (GA). Studies are limited in the “Extremely Preterm” population (<28 weeks GA)
• Infant massage can be used to improve muscle tone and positive stimulus to touch
• NICU infants are at higher risk of:
  • Developmental Delay
  • Cerebral Palsy
  • Learning Disabilities
  • Motor Planning Deficits

METHODOLOGY
• Observe weight change from 24.4-30.7 weeks GA with no intervention
• Observe weight change from 30.7-36.7 weeks GA with infant massage
• Performed infant massage on arms, legs, back and stomach. Alternated depending on patient presentation
• 15 infant massage sessions over six weeks
• 8-10 minutes per massage
• 2/7 pressure
• Type of oil used: “Sweet Oil”

RESULTS
• Patient gained 430 grams without infant massage
• Patient gained 1252 grams with infant massage

DISCUSSION/CONCLUSION
• The patient had an increase in weight gain while receiving infant massage
• This patient had similar results in weight gain that was observed in infant massage research for “Very Preterm” infants
• Limiting factors that would have also contributed to weight gain include:
  • State of health and age during weight testing periods
  • Sepsis contraindicated infant massage for 1 week
  • Mother performing infant massage without examiner present
• Research should focus on infant massage for the “Extremely Premature” infants in order to increase weight gain and decrease length of stay in the NICU

Patient Description
• Gestational Age: 24.4 weeks gestational age
• Birth Weight: 720 grams
• Comorbidities: Respiratory distress syndrome, bronchopulmonary dysplasia, and hyperbilirubinemia
• Surgeries: Patent ductus arteriosus ligation

Patient Weight Gain

<table>
<thead>
<tr>
<th>Gestational Age (weeks)</th>
<th>Weight (grams)</th>
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<tbody>
<tr>
<td>24.4</td>
<td>720</td>
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<tr>
<td>30</td>
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<tr>
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REFERENCES
• For more information on infant massage: