

37TH ASIA-PACIFIC

NURSING AND MEDICARE SUMMIT

OCTOBER 20-21, 2017 OSAKA, JAPAN

Myofascial release massage of breastfeeding mothers' pectoralis major muscle on newborns' breast milk intake and sleeping time: Randomized controlled trialWon Ryoung Choi¹, Kyoungae Kang² and Myung Haeng Hur¹¹Eulji University, Republic of Korea²Agasom Lactation Consulting Academy, Republic of Korea

Introduction & Aim: The Korea Committee for UNICEF conducted a one-on-one interview with 1,000 mothers of children under 2 years old from May to July 2016 and found that the rate of breastfeeding was 18.3%. Despite the many advantages of breastfeeding, maternal breastfeeding has been hampered by breast pain, breast congestion, nipple damage, lack of breastfeeding, fatigue from frequent feeding, lack of sleep and various discomforts in eating. Myofascial release massage is a compound word of Latin myo meaning muscle and fascial meaning membrane. Myofascial release massage is a stretching technique that relaxes the patient's posture and the direction of the force of the fascia appropriately to promote relaxation of the relaxed tissue. The purposes were to determine myofascial release massage on their pectoralis major muscle on newborns' breast milk intake and sleeping time.

Method: This research is a randomized controlled trial (RCT). The subjects were mothers with a 7 to 14-day-old newborns who gave birth at 37 weeks to 42 weeks of gestational age, who did not have complications related to pregnancy, delivery and puerperium and whose newborn infants had a birth weight of more than 2,500 g. Excluding mothers whose newborn baby had physiologic jaundice or other health problems or who were unable to breastfeed or on medication, the study was conducted with 31 subjects in an experimental group and 27 in a control group. As an experimental treatment, the experimental group breastfed after myofascial release massage on the pectoralis major muscle, while the control group breastfed without the massage. After Experiment-1 and 2, the infants were weighed twice, right before and after breastfeeding, in gram units and the difference between the two weights were calculated to determine the amount of milk they drank. Mothers of the newborns recorded milk powder supplement intake for 48 hours in cubic centimeter (cc) unit. For newborns' sleeping time after breastfeeding, mothers observed and recorded the feeding method and the newborns' sleeping time in a self-report form for 48 hours. SPSS Win 24.0 was used for homogeneity test between the two groups. Newborn infants' breast milk intake and sleeping time were evaluated by t-test and the experimental effect over time was analyzed by repeated measures of ANOVA.

Results: Breast milk intake of newborn infants had a statistically significant difference between the experiment group and the control group in Experiment-1 ($t=3.103$, $p=0.003$) and Experiment-2 ($t=3.087$, $p=0.003$). Milk powder supplement intake of newborns had a statistically significant difference between the experiment group and the control group in Experiment-1 ($t=-2.504$, $p=0.015$). The sleeping time after breastfeeding for 48 hours had a statistically significant difference between the experimental group and the control group ($t=2.230$, $p=0.030$).

Conclusion: This study found that myofascial release massage on the pectoralis major muscle increased breast milk intake and sleeping time of newborn infants while decreasing milk powder supplement intake. Therefore, the myofascial release massage on the pectoralis major muscle is strongly recommended in clinical settings to improve breastfeeding rate.

Biography

Choi Won Ryoung is a Graduate student and has opened a clinic as a Breast Care Manager to promote breastfeeding. Her interest is in the care of postpartum mothers and has her expertise in breast care for breastfeeding.

Notes:siwl2905@naver.com
mhhur@eulji.ac.kr