The effect of kangaroo mother care on physiologic responses to pain of an intramuscular injection in preterm neonates

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Abstract

Introduction: Preterm newborn are very vulnerable and frequently admit to NICU. They get much invasive painful procedure. These painful stresses have poor outcome in consciousness, stress and irritability. They cause changes in physiology is response such as pulse rate and oxygen saturation, crying duration and behavioral action.

Objectives: The aim of study was to compare kangaroo mother care and bedding care on response to pain by pulse rate, oxygen saturation, crying duration and NIPS test.

Materials & Methods: Forty preterm newborn randomly divided in two groups. In case group (N=20) baby get KMC 30 minutes before intervention and control group (N=20) were laid on bed. Two groups compare in pulse rate, oxygen saturation, crying duration and NIPS test. Pulse rate and oxygen saturation was checked two minutes before intervention, during intervention and three minutes after intervention. Crying duration determine by chronometer.

Results: There were no significant differences between two groups in NIPS test, pulse rate, tachycardia, crying duration before during and post intervention. But increasing in heart rate in case group was significantly lower than control group (p=0.01), oxygen saturation in control group was significantly lower than control group (p=0.008).

Conclusion: Increasing heart rate was significantly in KMC group and oxygen saturation was lower in this group. Therefore tolerance of pain in KMC is less painful.

Keywords: Preterm neonate- kangaroo mother care-pain-responses-vaccinate

Biography

Ashraf Mohammadzadeh professor of neonatology has completed neonatology at 36 years old from Mashhad University of medical Science, Iran. I am director of neonatal research center in this university since 2006 and co-chief of neonatal intensive care unit since 1992. I have published 71 papers in locally and international journals, 18 chapters of books, 66 supervision of thesis in general medicine, pediatric and neonatology, 190 participation in national and international congress with lecture and poster presentation. I have 14 registered clinical trials. I have been member of 62 scientific organs in Iran. I have 13 honors in pediatric and neonatology.