

Pain management in preterm infants during eye examinations



Abstract

Statement of the Problem: Retinopathy of prematurity (ROP) is often seen in preterm infants. There are many factors in the development of the disease, especially prematurity and low birth weight and it characterized to the incomplete vascular development and abnormal vascularization of the retina. Retinopathy screening is often carried out using the binocular indirect ophthalmoscopy method, which is a painful procedure for the preterm infant. The use of an eyelid speculum, scleral depression, application of pressure on the globe and traction of extraocular muscles increases the intensity of the pain felt by preterm infants during screening examinations.

The purpose of this study is to evaluate the effects of infant ROP positioning developed by the researchers that support the behavioral organization of the infant in terms of pain, heart rate, oxygen saturation and crying duration, before, during and after the screening examination.

Methodology & Theoretical Orientation: The study was designed as a randomized, controlled experimental study. It was carried out on 70 preterm infants. ROP position+pacifier was used in the experimental group while only the pacifier was used in the control group.

Findings: The preterm infants in the experimental group recorded lower pain scores at the beginning of the screening ($p = 0.01$), at the end of the screening ($p = 0.01$) and after screening ($p = 0.01$) than those in the control group. The heart rate was higher in the control group during screening ($p = 0.010$) and after screening ($p = 0.008$) than in the preterm infants in the experimental group. Oxygen saturation was not significantly different between the groups before, during or after screening. Crying duration was lower in the experimental group than in the control group ($p = 0.010$).

Conclusion & Significance: Positioning of the infant to support behavioral organization was found to be effective in reducing pain and shortening crying time during eye examinations

Publication

Pain Management with ROP Position in Turkish Preterm Infants During Eye Examinations: A Randomized Controlled Trial.

Supraventricular Tachycardia in Newborns and Nursing Approach: A Case Report

What Do Neonatal Nurses Know and Feel About Pain Management During Retinopathy of Prematurity Examination: A Qualitative Research

Attitudes and Competencies of Students and Educators Regarding Nursing Informatics5.

Evidence-Based Nursing Practices in Premature Retinopathy and Screening Order Pain Control

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Biography

Özlem Metreş has her expertise in preterm infant care with evidence-based nursing approaches. She worked in neonatal intensive care units as RN with very low birth weight and extremely low birth weight infants for nearly seven years. She observed the preterm infants developmental process. Pain management in preterm infants during eye examinations. Her pain management method based on research, teaching and administration both in hospital and education institutions. Suzan Yıldız has her expertise in children with congenital heart diseases. She is working at Istanbul University-Cerrahpasa, Florence Nightingale Faculty of Nursing. She was a president of the 'Pediatric Nursing Association' until 2017. She has various studies in newborn care with evidence based nursing approaches, newborn skin care, adolescent health, triage in pediatric emergency services, infectious diseases in childhood.



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