

IMPACT OF UPDATED EUROPEAN CONSENSUS GUIDELINES ON THE MANAGEMENT OF NEONATAL RESPIRATORY DISTRESS SYNDROME ON CLINICAL OUTCOME OF PRETERM INFANTS

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Introduction: European Consensus Guidelines (ECG) on the management of respiratory distress syndrome (RDS) have been developed and updated twice since 2007 reflecting changes in practice as new evidence emerges.

Aim: The aim of the study was to evaluate the progress in clinical outcome of babies after implementation of updated ECG in 2010.

Methods: Forty-eight neonates born in 2002 - 2003 (group 02/03; n=15) and 2012-2013 (group 12/13; n=33) at gestational age of 26.2 ± 1.7 weeks at the Clinic of Neonatology, JFM CU and University Hospital Martin, Slovakia were included into the retrospective study. Resuscitation procedures, ventilation support, administration of surfactant, postnatal adaptation and development of complications after birth were evaluated.

Results: In group 12/13 in comparison with group 02/03 there was higher rate of complete maternal corticosteroid prophylactic treatment (33% vs. 0%, $P < 0.001$), more children received primary nasal continuous positive airway pressure (N-CPAP) (20% vs. 54.5%, $P < 0.01$) and repeated dose of surfactant (33% vs. 0%, $P < 0.001$), had reduced rate of mortality, bronchopulmonary dysplasia and necrotizing enterocolitis.

Conclusion: The management of extremely preterm newborns improved very fast over the decade resulting in significant reduction of mortality and morbidity.

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