Delivery Room Resuscitation of the Newborn; A continuous Dilemma

Neonatal resuscitation is an attempt to facilitate the dynamic transition from fetal to neonatal physiology. Advances in the current practices in delivery room management of the neonate are continuous especially in cardiopulmonary resuscitation techniques for term and preterm infants and in the areas of cerebral resuscitation and thermoregulation as well as resuscitation in special circumstances (such as the presence of congenital anomalies). However, many controversies existed and future trends in neonatal resuscitation need to be more explored [1].

The 2010 International Consensus on Cardiopulmonary Resuscitation addresses many new concepts and changes in neonatal resuscitation program including assessment of cardio-respiratory transition and need for resuscitation, oxygen use in neonatal resuscitation, meconium suctioning at perineum, ventilation strategies, use of continuous positive airway pressure, devices for assisting ventilation, use of exhaled CO₂ detectors to confirm tracheal tube placement, chest compressions, medications, vascular access, temperature control and timing of cord clamping [2].

Of these advances, ventilation strategies during resuscitation and use of positive pressure ventilation have remained the mainstay of treatment for respiratory distress in newborns especially in preterm babies in order to prevent ventilatory induced lung injury and subsequent development of complications as broncho-pulmonary dysplasia (BPD) – which is based on lung inflammation [3].

Many clinical trials in these domains are running especially use of sustained lung versus bag and mask inflation (SLOMI TRIAL) in delivery room resuscitation to reduce the need for intubation and mechanical ventilation, and improve respiratory outcome in preterm neonates [4].

The Journal of Pediatrics & Neonatal Care welcomes, helps and supports all health care providers to exchange ideas and opinions that strive for more efficient care and improvement in delivery room resuscitation especially in developing countries and prevent subsequent complications of such procedures.

References