

Breastfeeding success after laryngeal mask airway resuscitation

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Abstract

Background. Positive pressure resuscitation by laryngeal mask airway (LMA) may expose the neonate to gas leak and gastric air insufflation, influencing postnatal gastrointestinal adaptation and breastfeeding success.

Methods. Term neonates admitted to regular nursery of the Department of Pediatrics of Padua University (Italy), from January 2005 to December 2005, after positive pressure resuscitation by LMA (Group A, 50) were compared with neonates who required positive pressure resuscitation by endotracheal tube (ETT) (Group B, 13) and to non resuscitated control neonates, matched for gestational age, (Group C, 100).

Results. Gestational age and birth weight were comparable among Group A, B, and C neonates. In addition, their ages at the first feeding and those of the first meconium emission were comparable. Diversely, LMA-, and ETT-resuscitated neonates presented a reduced exclusive breastfeeding rate at discharge and an increased hypoglycemia occurrence during postnatal adaptation. Moreover, ETT-resuscitated neonates presented a lower Apgar's score at 1 min, a significant increased regurgitation rate, and a delayed urine emission in comparison to LMA-resuscitated neonates.

Conclusion. LMA- and ETT-positive pressure resuscitation impair postnatal gastrointestinal adaptation and breastfeeding success at discharge with equal frequency and to similar degree in term neonates. Regurgitation reflex is instead, enhanced after ETT-resuscitation.

Keywords: Breastfeeding, laryngeal mask airway, resuscitation