



NEONATAL RESUSCITATION 2005-2010 AT THE ATLANTIC SIDES: NRP (AHA) VERSUS ENLS (ERC) COURSE

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INTRODUCTION: After the 2005 International Consensus on Cardiopulmonary Resuscitation Cardiovascular Care Science was published, each Resuscitation Council belonging to ILCOR was charged with developing resuscitation guidelines in its own region, based on the scientific principles defined by CoSTR.

THE AIM of this study is to compare the Newborn Resuscitation Program(NRP) and the European Newborn Life Support(ENLS) courses based on the guidelines of AAP/AHA(Circulation 2005;112:IV-188-IV-195) and European Resuscitation Council (Resuscitation 2005; 6751,S97-S133), respectively.

MATERIALS AND METHODS.

We followed CoSTR format to evaluate both courses.

RESULTS:

Suction:

NRP set to clear the airway with suction catheter, while ENLS limited suction only if there is particulate matter obstructing the airway and if required, under direct vision.

Supplementary oxygen:

NRP and ENLS warn about the potential damages caused by hyperoxia; NRP allows room air during resuscitation for a maximum of 90 sec before providing supplementary oxygen if there is no appreciable improvement. Peripartum meconium management, drugs, temperature control, devices to achieve effective ventilation and withholding resuscitative efforts: both courses give similar information.

Ventilation strategies:

ENLS suggests 5 initial inflation breaths, initial (preterm) peak pressure of (20)30 cm H₂O, inflation time 2-3 sec, then re-evaluation of heart rate, followed by ventilation breaths at a rate of 30-40/minute; NRP suggests peak pressure of 30-40 cm H₂O, inflation time undefined, rate of ventilation 40-60/min, re-evaluation of heart rate after 30 sec; ENLS, and not NRP, suggests jaw thrust manouvre to open the airway of a neonate.

CONCLUSIONS:

There are clearly some differences between the two algorithm even though both agreed on the Consensus on Science statement. NRP and ENLS show differences in airway and ventilation managements of the newborn. Since lung ventilation seems to be pivotal in newborn cardiopulmonary resuscitation, health care providers should be aware of these differences in order to strengthen their resuscitation skills.



International ENLS- & GIC-ENLS courses Suedtirol 2005-2007



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