New guidelines in resuscitation come out every 5 years and are published by relevant national and international bodies such as the European Resuscitation Council, American Heart association, American Academy of Pediatrics, Australian and New Zealand Committee on Resuscitation, resuscitation Council of Asia etc.

New European Resuscitation Council (ERC) and Resuscitation Council UK guidelines for ‘Resuscitation and support of transition of babies at birth’ were published simultaneously in October 2015. Like the others, they are based on the evidence derived from a critical evaluation of relevant scientific publications over the preceding 5 years organised and coordinated by the International Liaison Committee on Resuscitation (ILCOR). Where there was no new evidence the guidelines may reflect those evidence evaluations carried out in 2005 or 2010 and incorporate published papers not evaluated by the ILCOR. However, this process is clearly still not completely understood and small differences between guidelines may cause confusion unless the process is clear.

This presentation will describe the International Liaison Committee on Resuscitation (ILCOR) process of evidence evaluation, which produces the CoSTR document, and the subsequent production of guidelines. It will highlight the most significant changes to the European and UK guidelines:

1. The title of the guidelines has been changed from Resuscitation at Birth to Resuscitation and support of transition at birth to reflect an emphasis on supporting transition to air breathing rather than resuscitation.
2. A delay in the clamping of the cord of at least 1 min from the time of complete delivery of the baby is recommended for all babies when possible.
3. The newborn baby's temperature should be maintained in the normal range (36.5°C to 37.5°C) unless it is being considered for therapeutic hypothermia. Active steps should be taken to achieve this.
4. An accurate assessment of heart rate can be made using ECG or pulse oximetry.
5. Tracheal intubation and suction is no longer routine for any baby born through meconium-stained liquor. Instead the emphasis should be on providing appropriate resuscitative manoeuvres as soon as possible and only intubate the trachea for suction in those infants whose airway is blocked.
6. Begin the resuscitation of term babies in air and that of preterm babies (<35 weeks gestation) in low concentrations of oxygen (21%–30%). Use pulse oximetry to guide subsequent use of oxygen.
7. Nasal CPAP may be used during the transition and subsequent respiratory support of spontaneously breathing preterm infants (<30 weeks gestation).
8. Chest compressions are started when the heart rate remains less than
60/min after five effective inflation breaths and 30 s of effective ventilation. Coordinate compressions and ventilations at a ratio of 3:1.

9. Where possible brief the team before resuscitation and debrief afterwards. Counsel and communicate with the parents in a timely manner.

Finally the process of international treatment recommendation transferring into guidelines will be demonstrated and the contentious areas of initial oxygen concentrations and inflation/sustained ventilations addressed.

‘When all think alike, then no one is thinking’

Walter Lippman

References


Wyllie J, Ainsworth S. What is new in the European and UK neonatal resuscitation guidance? *Arch Dis Child Fetal Neonatal Ed*
doi:10.1136/archdischild-2015-309472