

# A better start for babies: ventilation without cord clamping

The first international Neo-Resus Conference, Newcastle-upon-Tyne, 31 March 2017

Medical professionals from around the world joined together at the first ever Neo-Resus conference. The one-day event featured expert international speakers presenting clinical research and current practices in neonatal resuscitation, and highlighted the rising interest and support for optimal cord clamping.

As the importance of avoiding early cord clamping is now recognised, optimal cord clamping has moved on to providing ventilation without clamping the cord for neonates that require assistance to breathe at birth. The line-up of speakers at Neo-Resus was impressive, featuring a number of the world's leading minds on optimal cord clamping and neonatal resuscitation, including Dr Anup Katheria from San Diego, Professor Karen Fairchild from Virginia, Professor Judith Mercer from Rhode Island and Dr Ronnie Knol from Rotterdam.

Dr Katheria, Director of the Neonatal Research Institute at the Sharp Mary Birch Hospital for Women and Newborns, explained the physiological rationale for providing ventilation and expansion of the

lungs before the cord is clamped. He showed that in very preterm neonates, provided the cord remains intact and the neonate is given vigorous stimulation to promote respiration, there are no obvious improved outcomes in babies who were ventilated during the first minute. He showed how it is possible to bring the resuscitation equipment (the LifeStart resuscitation unit) close enough to the mother to keep the cord intact. For term babies with asphyxia he presented ongoing research that suggests neonates with extended delayed cord clamping (>1 minute) may benefit from a decreased need for resuscitation interventions and improved haemodynamics, as demonstrated by an increased blood pressure and cerebral oxygenation.

Professor Fairchild described the multicentre randomised controlled trial starting in the USA of assisted ventilation during delayed cord clamping for extremely preterm infants using the VentFirst pole and LifeStart for resuscitation. She emphasised the importance of co-ordinated teamwork and simulation

practice in order to achieve an effective level of care for a newborn infant.

Dr Knol presented the Dutch approach to providing mother-side resuscitation and how the ConCord resuscitation unit was designed to perform the ABC-approach (aeration, breathing, clamping) to a neonate at birth based on physiological parameters.

Professor Mercer explained how there is a serious danger of cardiac arrest in a newborn infant that has early cord clamping. She presented good evidence that sudden asystole can take place in a neonate with cord compression and body compression if the cord is clamped immediately at birth. She explained how a nuchal cord can be resolved without clamping the cord by using the somersault manoeuvre.

Neonatal Nurse Consultant George Brooks described the experience of the new Northumbria Hospital Maternity Unit where mother-side resuscitation with a LifeStart resuscitation unit has been the standard of care since 2015. He presented outcome data showing that fewer babies



Organisers and speakers at the first international Neo-Resus conference.



Speaker Margaret Thomas (centre), joined by delegates during a break-out session.

required resuscitation and admission to the special care baby unit.

Advanced neonatal nurse practitioner Margaret Thomas presented research showing just how much parents appreciate their newborn baby remaining right by their side even when it apparently needs resuscitation. She explained how Liverpool Women's Hospital has now adopted mother-side resuscitation as its standard approach.

Every significant change in medicine and midwifery presents a challenge and student midwife Hannah Tizard told the audience how she has used the full force of social

media in the continued success of the Blood to Baby campaign, sponsored by Inspiration Healthcare.

The conference concluded with the enthusiasm and common sense approach of midwife Karen Strange from Colorado. Her infectious passion shone through as she presented her philosophy of just taking a moment's pause; the pause that every mother and baby is entitled to take immediately after birth. She then went on to give her experience of teaching neonatal resuscitation throughout the world and presented anecdotal scenarios of ventilation of newborn babies without

clamping the cord.

The Neo-Resus conference highlighted the importance of neonatal, paediatric, obstetric, midwifery and neonatal nurse co-operation: everyone has to work together to enable a better start for babies.

### David Hutchon

Retired Consultant Obstetrician,  
Darlington Memorial Hospital

### Michelle Salem

Midwife, Northumbria Healthcare  
NHS Trust

## Join us to help improve patient safety

In collaboration with BAPM, *Infant* journal is keen to help improve patient safety and raise awareness of issues affecting neonatal patients, their families and staff by devoting a specific section to patient safety in each edition of the journal. Anyone can submit an article so if you have ideas for highlighting safety aspects to improve care, please do let us know.

If you would like to submit a patient safety article to *Infant*, please email [lisa@infantgrapevine.co.uk](mailto:lisa@infantgrapevine.co.uk)

If you have any incidents for national learning, please contact BAPM by emailing [bapm@rcpch.ac.uk](mailto:bapm@rcpch.ac.uk)

