

62 **TECHNIQUES AND DEVICES FOR NEONATAL RESUSCITATION**

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Establishing breathing and oxygenation after birth is vital for survival and long-term health of premature infants. However, approximately 10% of premature infants require breathing support at birth. An international consensus and various national resuscitation guidelines suggest techniques and equipment for neonatal resuscitation. They all agree positive pressure ventilation is the cornerstone of breathing support in the delivery room.

A lung-protective strategy should start immediately after birth. To facilitate the early development of functional residual capacity, and improve oxygenation during the transition of preterm infants, sustained inflations, positive end expiratory pressure and continuous positive airway pressure (CPAP) should be applied at the initiation of respiratory support. Although sustained inflations (SI) are advocated as lung recruitment maneuvers and positive end expiratory pressure helps to maintain end expiratory lung volume, neither of these has been mandated in neonatal resuscitation guidelines. This presentation will provide an update on current literature about techniques and devices used during neonatal resuscitation. Initial respiratory support provided with either CPAP, SI, and positive pressure ventilation along with available devices (e.g. face mask, nasal prong, Guedel airway, Laryngeal airway mask) will be discussed. In addition, new insights about intubation and chest compressions will be presented.

63 **ADULT OUTCOMES IN ACHIEVEMENT AND SOCIAL INTEGRATION**

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The lecture will provide a wide overview of studies on achievements as indicated by academic and occupational outcome and independent living of those born preterm. The lecture will further explore how well preterm children are integrated into society, participate in peer activities, have formed partner relationships and are reproductively active. How do they view their quality of life? Most of these studies have focussed on very preterm or very low birth weight infants but where available, information on moderate to late preterm adults will also be addressed.

64 **WE THINK WE STILL HURT OUR NEWBORNS!**

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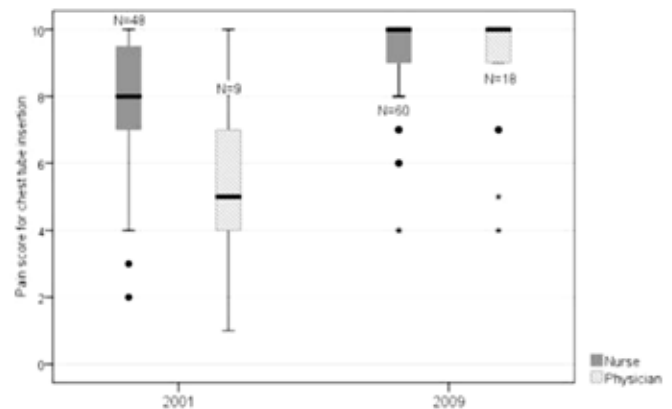
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**Background and aims** Painful procedures in Neonatal Intensive Care Units are hard to avoid. We documented a drop in painful procedures from average 14 in 2001 to 12 in 2009 per patient per day. This study aimed to uncover how nursing and medical staff perceive the painfulness of these procedures and if perceptions have changed over time.

**Methods** Both in 2001 and 2009 nursing and medical staff rated the painfulness of 15 skin-breaking and 13 other procedures on a scale from 0 (not painful) to 10 (worst possible pain). The ratings of skin-breaking and other procedures served as outcome measures.

**Results** Response rates were 60% (N=58) and 72.4% (N=84) respectively in 2001 and 2009. The mean rating of the skin-breaking procedures decreased from 6.5 (SD 1.4) in 2001 to 6.1 (SD 1.5) in

2009 (p=0.18). The mean rating of other skin-breaking procedures decreased from 4.8 (SD 1.3) to 4.5 (SD 1.3) (p=0.25). Contrary to the trend, chest tube insertion was rated statistically significantly higher by nurses and physicians in 2009, p<0.001 and p=0.004 (Figure).



Abstract 64 Figure 1

**Conclusion** Overall, perceptions of health professionals in our Neonatal ICU concerning painfulness of procedures have not changed significantly over time despite the introduction of pain reducing interventions such as sucrose and developmental care after 2001.

65 **COMPARISON OF EFFECT OF KANGAROO CARE AND MOTHER HOLDING ON SLEEP AND WAKING STATES OF PRETERM NEONATES**

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**Background and aim** Sleep and waking disorders are the main problems of preterm neonates in Neonatal Intensive Care Unit (NICU) that occur influence by many stimuli and care activities of NICU and this may have irreversible effects on their brain development. So that the objective of this study is to assess the effect of two care methods on the sleep and waking states of preterm neonates.

**Method** In a clinical trial study a total of 70 eligible preterm neonates with gestational age between 32–37 weeks and admitted to NICU were selected and randomly divided in two groups of kangaroo care and holding by mother without directly skin contact. Data collection process was carried out using the behavioral sleep and wake scale of Als. The researcher every two minutes observed and recorded the sleep and wake behavior of neonates of two groups, in 20 minutes pre intervention, during 70 minutes of intervention and during 20 minutes post intervention. The collected data were analyzed using variance analysis test via repetitive sizes and Independent T test.

**Result** The kangaroo care group in compare to holding group significantly had more quiet sleep and alert awake and less drowsiness (P<0/001), active awake, and crying states (P=0/002).

**Conclusion** Neonates had more beneficial and less undesirable states of sleep and waking during kangaroo care. So that kangaroo care may be helpful to improve sleep and waking states of preterm neonates in NICU.

66 **BREASTFEEDING PRETERM INFANTS - A DANISH SURVEY**

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