

DELIVERY ROOM MANAGEMENT

Positioning of term infants during delivery room routine handling – analysis of videos

Background

Newborns are mainly placed supine direct after birth. However, there is no evidence if this position has advantages regarding the postnatal adaptation or newborns could eventually benefit when placed on side. This is a retrospective study comparing heart rate, SpO₂ and agitation between term infants placed supine and term infants placed on side during their first minutes of life.

Summary of results

Infants placed on side reached SpO₂>90% faster as these placed supine (p=0.16). SpO₂ values at 5th minute were also higher on newborns placed supine (p=0.055) but no significant difference was found at 8th minute. There were significantly (p=0.04) higher SpO₂ values at 8th minute on newborns placed on the left side than those placed on the right side. No differences were found regarding heart rate. Infants placed supine were significantly more agitated at every time point than "side" placed infants. Total time spent for stimulation was significantly higher on "supine" infants (p<0.001). There were no significant differences regarding suctioning (suctioned were: 31% of infants placed supine, 28% on the right and 10% on the left side). CPAP application was almost exclusively applied in supine position.

Strength

This is the first study to compare newborn positioning in the delivery room. According to the results newborns placed on side could benefit regarding oxygenation and agitation.

Limitations

The study concerns exclusively term infants. There is no evidence about CPAP application outcome between the 2 positions, due to the small amount of infants that were on respiratory support on side.

Practical conclusion

Side position in the delivery room management of the term newborn seems to be safe and of some benefit regarding agitation and oxygenation. However, a randomized controlled trial is needed in order to confirm the results.

Konstantelos D, Gurth H, Bergert R, Ifflaender S, Rüdiger M. Positioning of term infants during delivery room routine handling – analysis of videos. BMC Pediatrics, 2014 14:33.

Written by:

Dimitrios Konstantelos, MD