

# DELIVERY ROOM MANAGEMENT

*Oronasopharyngeal suction versus wiping of the mouth and nose at birth: a randomised equivalency trial.*

## Background

Suction is one of the most debating topics regarding delivery room management of the newborn. The latest resuscitation guidelines suggest wiping of the newborn's mouth as an alternative to suctioning. According to the guidelines suctioning should be applied only to non-vigorous newborns born through meconium stained amniotic fluid or those in need of positive pressure ventilation. Kelleher et al. tried to compare the efficacy of suctioning vs. wiping of the mouth direct after birth using as a primary outcome the difference between the respiratory rates between these 2 groups.

## Summary of results

Respiratory rates 1,8,16 and 24 hours after birth did not differ between wipe and suction group of newborns [51 (SD8) vs. 50 (SD6) respectively]. Apgar score at 1st and 5th minute as also SpO2 values at discharge did not show any significant differences. More newborns in the wiping group were admitted to NICU [45 (18%) vs. 30 (12%)] and required an advanced resuscitation at birth [24 (10%) vs. 17 (7%)] however, the differences were not significant.

## Strength

It is the first study to compare a method alternative to suction in the delivery room management of the newborn. It confirms the recommendation of the latest resuscitation guidelines that wiping the nose and mouth is not harmful.

## Limitations

There is no data regarding newborns before the 35th week of gestation. Comparison of SpO2 values between the 2 groups is limited to the time point of discharge. There is no data for vital parameters in the first minutes of life and no data comparing the 2 groups regarding the presence of the most "accused" side effects of suctioning (severe bradycardia or apnoea).

## Practical conclusion

Kelleher et al. showed that wiping of the mouth vs. suctioning has an equivalent efficacy regarding respiratory rates after 1 to 24 hours after birth. However, there is no comparison of the influence on the postnatal adaptation in the first minutes of life. Future studies focusing on the vital parameters during the newborn's transition to the extrauterine life, are needed.

**Kelleher J**, Bhat R, Salas AA, Addis D, Mills EC, Mallick H, Tripathi A, Pruitt EP, Roane C, McNair T, Owen J, Ambalavanan N, Carlo WA. Oronasopharyngeal suction versus wiping of the mouth and nose at birth: a randomised equivalency trial. *Lancet*. 2013 Jul 27;382(9889):326-30. doi: 10.1016/S0140-6736(13)60775-8.

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