



# Video versus Direct Laryngoscopy for Urgent Intubation of Newborn Infants

Lucy E. Geraghty, Emma A. Dunne, Caitríona M. Ní Chathasaigh, Akke Vellinga, Niamh C. Adams, Eoin M. O'Curraín, Lisa K. McCarthy, Colm P.F. O'Donnell



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## EXECUTIVE SUMMARY

This study, published in the *New England Journal of Medicine*, compared the effectiveness of Video Laryngoscopy (VL) versus Direct Laryngoscopy (DL) for urgent intubation of newborn infants. Conducted at the National Maternity Hospital in Dublin, the randomized trial involved 214 neonates.

The results showed that VL significantly increased the success rate of first-attempt intubations (74%) compared to DL (45%), and was associated with better oxygenation and heart rate stability during the procedure. These findings suggest that VL should be considered for inclusion in neonatal intubation protocols to improve safety and outcomes.

## STUDY DETAILS

Single-Centre RCT

214  
Infants

Stratified by gestational age (<32 weeks or ≥32 weeks)



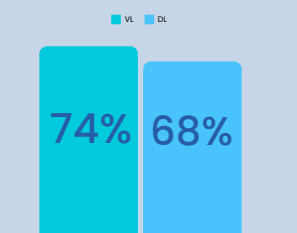
74%

74% of infants were successfully intubated on the first attempt using VL

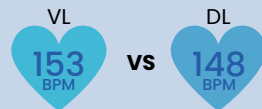


45%

45% of infants were successfully intubated on the first attempt using DL



Median oxygen saturations during intubation with VL were 74%



Median Heart Rate during intubation



73%

In the 73 infants born below 32 weeks gestational age, 53 were successfully intubated first time with the VL.



63% of infants intubated in the delivery room with the VL were successful on the first attempt



32 out of 45 infants under 1000g were intubated first time using the VL (71%)

## FINDINGS



VL significantly improves the first-attempt intubation success compared to DL in neonates. VL associated with better oxygenation and heart rates during intubation.



## RECOMMENDATIONS

Consider integrating VL into neonatal resuscitation protocols despite higher costs. Neonatal intubation programs should include VL training.

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The trial was funded by the National Maternity Hospital Foundation. The video laryngoscopes were provided by Karl Storz on loan with a subsequent purchase offer at a reduced rate.



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T+44 (0) 330 175 0000

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