The Use of Resuscitative Interventions
Beyond Intubation After Extremely Early Delivery

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Results

- Infants that received chest compressions, epinephrine, or both were more likely to die in the delivery room when compared to infants that did not receive those interventions.
- Smaller, younger infants more likely to die in the delivery room when compared to larger, older babies.
- Those born extremely prematurely due to preterm labor or cervical insufficiency (gestational issues) were nearly 5x more likely to die in the delivery room as compared to those delivered for maternal or fetal concerns.

Goal

- We aimed to study mortality risks in extremely early newborns who did and did not receive resuscitative interventions beyond intubation to better understand the efficacy of recent guidelines encouraging shared decision making for resuscitation for newborns as early as 22 weeks.

Strategy

- This was a retrospective, cohort study of newborns and mothers delivering from 2011 through 2020 at 13 U.S. centers.
- Our study only included liveborn newborns between 22 0/7 and 24 6/7 weeks gestation who were intubated in the delivery room.
- A logistic regression analysis was performed to calculate odds ratios and 95% confidence intervals.

Conclusions and Future Directions

- Antenatal counseling for parents facing extremely early delivery requires evaluation of risks and benefits. The 10-fold higher rates of delivery room death for those requiring chest compressions, epinephrine, or both may inform counseling regarding trials of therapy in the delivery room.
- Complete analysis of each gestational week subgroup
- Limited data was collected on NICU stay, but we will look at need for CC or epi and survival to home and complications
- Present these findings Pediatric Academic Society Meeting to spread awareness and influence standardization protocols amongst key players.

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- INDEED centers: University of Chicago, Northshore, Indiana University, Medical College of Wisconsin, University of Mississippi, Northwestern University, University of Michigan, Columbia, University of Virginia, Vanderbilt University, Johns Hopkins All Children’s Bayfront, University of Hawaii, St. Vincent, Christ Hospital