

Perivable births: Time to make the gray zone a little less gray?

Riya Kataria^{1*}, Tusharindra Lal¹, Usha Vishwanath²

¹Medical student, Sri Ramachandra Institute of Higher Education and Research, Chennai, India

²Professor and Head, Department of Obstetrics and Gynaecology, Sri Ramachandra Institute of Higher Education and Research, Chennai, India

*Corresponding Author: Riya Kataria, Medical student, Sri Ramachandra Institute of Higher Education and Research, Chennai, India

Received date: 15 July 2021; Accepted date: 20 July 2021; Published date: 23 July 2021

Citation: Kataria R, Lal T, Vishwanath U. Perivable births: Time to make the gray zone a little less gray? J Med Case Rep Case Series 2(7): <https://doi.org/10.38207/jmcrcs20210090>

Copyright: © 2021 Riya Kataria. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Over the last few decades, we have seen a tremendous growth of neonatal intensive care units (NICU) around the world. The development of these NICUs along with advancements in infrastructural facilities and the availability of well-trained medical and nursing manpower has led to favorable outcomes and survival of premature newborns.

Perivability is the stage of fetal maturity that ensures a reasonable chance of extrauterine survival with adequate clinical resuscitation. The outcome of these infants remains a topic of debate particularly in developing countries like India, due to the paucity of resources supplemented by various social, ethical, and cultural norms. The viability of the fetus depends on its survival into the neonatal period and may range from near-certain mortality to a lifetime of morbidities.[1] Higher survival rates have been reported (2 % and 77 %) ranging from gestational ages of 22 weeks to 26 weeks respectively.[2] However, the period between 23 and 24 weeks with birth weights of 500 and 600 g seems to be a phase of indecision and argument. This is known as the “gray zone”. [3] This phase often witnesses a conflict between the neonatologists and parents particularly when the prognosis is poor, and mortality is inevitable. The indisputable fact remains that any decision taken by the clinician would have a long-term impact not only on the newborn but the family as well. In such cases, shared decision-making is suggested while advocating appropriate palliative treatment alternatives. These alternatives are principally allocated to those neonates who are not expected to survive even the first 24-48 hours. It is evident that the parents of these suffering neonates seem to be extremely satisfied

Conflict of Interest: The authors declare that they have no competing interests.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

1. Nimbalkar SM, Bansal SC (2019) Perivable birth–The ethical conundrum. *Indian pediatrics*. 56(1): 13-7.
2. Costeloe KL, Hennessy EM, Haider S, Stacey F, Marlow N, et al. (2012) Short term outcomes after extreme preterm birth in

with provisions of supportive therapy as compared to those who did not receive it.[4] Furthermore, in view of the limited availability of resources, it is the duty of the clinician to focus on prolonging wholesome life rather than just postponing death. Hence, a correlative decision must be made either to withhold or withdraw treatment only after speculating the status of the newborn. The conundrum of morality and neonatal well-being may simply be resolved with mutual understanding among clinicians and parents while respecting contradictory opinions if any.

For a preterm birth, a long-term follow-up is required owing to various comorbid conditions including bilateral blindness, hearing impairment requiring amplification, inability to walk ten steps with support, cerebral palsy, etc.[5] In India, this becomes very challenging and requires a proactive approach from the clinicians’ part to prevent these babies from becoming an emotional and financial burden to not just their families but the society as well.

In the absence of randomized controlled trials (RCTs) and lack of clear guidelines, clinical judgment of physicians and the availability of necessary resources will largely determine the particular resuscitation techniques employed. To facilitate an informed decision-making process, there is a need for multidisciplinary counseling among the obstetrician, the neonatologist, and the parents. The clinician is obligated to preserve the basic principles of autonomy, justice, beneficence, and non-maleficence owing to the integrity of the medical profession.

Authors’ Contribution: RK and TL contributed towards literature search, data collection, and UV helped in drafting of the article and important content writing.

England: comparison of two birth cohorts in 1995 and 2006 (the EPICure studies). *Bmj*. 345: e7976.

3. Singh J, Fanaroff J, Andrews B, Caldarelli L, Lagatta J, et al. (2007) Resuscitation in the “gray zone” of viability: determining

- physician preferences and predicting infant outcomes. *Pediatrics*. 120(3): 519-526.
4. Petteys AR, Goebel JR, Wallace JD, Singh-Carlson S (2015) Palliative care in neonatal intensive care, effects on parent stress and satisfaction: a feasibility study. *American Journal of Hospice and Palliative Medicine*®. 32(8): 869-75.
 5. Mercier CE, Dunn MS, Ferrelli KR, Howard DB, Soll RF (2010) Neurodevelopmental outcome of extremely low birth weight infants from the Vermont Oxford network: 1998–2003. *Neonatology*. 97(4): 329-38.