

# ANZCOR Guideline 13.10 – Ethical Issues in Resuscitation of the Newborn Infant

## Guideline

### 1 Initiating Resuscitation

The birth of extremely premature infants and those with severe congenital anomalies raises questions with the parents and among clinicians about initiation of resuscitation.<sup>1-7</sup> Resuscitation does not mandate continued support. Not starting resuscitation or starting intensive care which is stopped later, when the details of the infant's condition are known, are ethically and legally equivalent.<sup>8</sup> The latter approach allows time to gather more complete clinical information and for discussions with the family. If there is doubt whether to initiate or withhold resuscitation, it is best to start and later withdraw treatment when the situation has been clarified. Exceptions include infants with anencephaly and extremely immature infants for whom there is very little possibility of intact survival. Together, clinicians and parents may decide to withhold or withdraw treatment on the basis of futility and in the 'best interests' of the infant.<sup>8</sup>

When gestation, birth weight, or congenital anomalies are associated with almost certain early death and an unacceptably high morbidity is likely among the rare survivors, resuscitation is not indicated.<sup>9</sup>

In conditions associated with a high rate of survival and acceptable morbidity, resuscitation is nearly always indicated. In conditions associated with uncertain prognosis, when there is borderline survival and a relatively high rate of morbidity, and where the burden to the child is high, the parents' views on resuscitation should be supported.<sup>9</sup>

Recently, prognostic scores have been developed to assist in decision-making about resuscitation for infants born < 25 weeks gestation. ANZCOR suggests that there is insufficient evidence to support the routine use of these scores in an Australian and New Zealand setting, when compared to prognostication based on estimated gestational age assessment alone (CoSTR 2015).<sup>10</sup>

Whenever possible, there should be a consistent and coordinated approach from the obstetric/midwifery and neonatal teams in applying this guideline and in communicating with the parents to develop an agreed-upon management plan.

## 2 Discontinuing Resuscitation

---

In a newly born late preterm and term baby, ANZCOR suggests that it is reasonable to stop resuscitation if the heart rate is undetectable and remains so for 10 minutes, because both survival and quality of survival deteriorate precipitously by this time. However, the decision to continue resuscitation efforts beyond 10 minutes when there is no heart rate, or a very low heart rate is often complex and may be influenced by issues such as whether the resuscitation was considered to be optimal, availability of advanced neonatal intensive care (including therapeutic hypothermia), presumed etiology and timing of the arrest, the gestation of the baby, specific circumstances prior to delivery (e.g. known timing of the insult) and wishes expressed by the family. (CoSTR 2015, weak Recommendation, very low quality of evidence)<sup>10</sup>

The absence of spontaneous breathing or an Apgar score of 1-3 at 20 minutes of age in babies > 34 weeks but with a detectable heart rate are strong predictors of mortality or significant morbidity. In resource-limited settings, such as in areas remote from neonatal intensive care, it may be reasonable to stop assisted ventilation in babies who meet this criterion. (CoSTR 2015, weak recommendation, very low quality of evidence)<sup>10</sup> Consultation with a neonatologist or paediatrician is recommended, if possible.

If it is decided to withdraw or withhold resuscitation, care should be provided in a way that is focused on the baby's comfort (if signs of life are still present) and dignity, and on support of the parents.

## References

---

1. Byrne PJ, Tyebkhan JM, Laing LM. Ethical decision-making and neonatal resuscitation. *Semin Perinatol* 1994;18:36-41.
2. Casalaz DM, Marlow N, Speidel BD. Outcome of resuscitation following unexpected apparent stillbirth. *Arch Dis Child Fetal Neonatal Ed* 1998;78:F112-F5.
3. Davies JM, Reynolds BM. The ethics of cardiopulmonary resuscitation, II: medical logistics and the potential for good response. *Arch Dis Child* 1992;67:1502-5.
4. Davies JM, Reynolds BM. The ethics of cardiopulmonary resuscitation. I. Background to decision making. *Arch Dis Child* 1992;67:1498-501.
5. Davis DJ. How aggressive should delivery room cardiopulmonary resuscitation be for extremely low birth weight neonates? *Pediatrics* 1993;92:447-50.
6. Landwirth J. Ethical issues in pediatric and neonatal resuscitation. *Ann Emerg Med* 1993;22:502-7.
7. Yeo CL, Tudehope DI. Outcome of resuscitated apparently stillborn infants: a ten year review. *J Paediatr Child Health* 1994;30:129-33.
8. Skene L. *Law and Medical Practice. Rights, Duties, Claims and Defences*. 2nd ed. Australia: LexisNexis Butterworths; 2006.
9. Perlman JM, Wyllie J, Kattwinkel J, et al. Special Report--Neonatal Resuscitation: 2010 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science With Treatment Recommendations. *Pediatrics* 2010;126(5):e1319-44.

10. Wyllie J, Perlman JM, Kattwinkel J, et al. Part 7: Neonatal resuscitation: 2015 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. *Resuscitation*. 2015;95:e169-201.