The Hierarchy of Evidence

The Royal Children's Hospital Melbourne

The Hierarchy of evidence is based on summaries from the National Health and Medical Research Council (2009), the Oxford Centre for Evidence-based Medicine Levels of Evidence (2011) and Melynyk and Fineout-Overholt (2011).

- I Evidence obtained from a systematic review of all relevant randomised control trials.
- II Evidence obtained from at least one well designed randomised control trial.
- III Evidence obtained from well-designed controlled trials without randomisation.
- IV Evidence obtained from well designed cohort studies, case control studies, interrupted time series with a control group, historically controlled studies, interrupted time series without a control group or with case- series
- V Evidence obtained from systematic reviews of descriptive and qualitative studies
- VI Evidence obtained from single descriptive and qualitative studies
- VII Expert opinion from clinicians, authorities and/or reports of expert committees or based on physiology
- Melynyk, B. & Fineout-Overholt, E. (2011). *Evidence-based practice in nursing & healthcare: A guide to best practice (2nd ed.).* Philadelphia: Wolters Kluwer, Lippincott Williams & Wilkins.
- National Health and Medical Research Council (2009). *NHMRC levels of evidence and grades for recommendations for developers of guidelines* (2009). Australian Government: NHMRC. http://www.nhmrc.gov.au/_files_nhmrc/file/guidelines/evidence_statement_form.pdf
- OCEBM Levels of Evidence Working Group Oxford (2011). *The Oxford 2011 Levels of Evidence*. Oxford Centre for Evidence-Based Medicine. <u>http://www.cebm.net/index.aspx?o=1025</u>

Reference (include title, author, journal title, year of publication, volume and issue, pages)	Evidence level (I-VII)	Key findings, outcomes or recommendations
Jacobs S.E., Berg M., Hunt R., Tarnow- Mordi W.O., Inder T.E., Davis P.G. (2013). <i>Cooling for newborns with hypoxic ischemic</i> <i>encephalopathy</i> . Cochrane Database SystRev, Jan 31, 1. CD003311.		 Beneficial in term and late preterm infants with HIE Reduces mortality without increase in major disabilities in survivors Benefits outweigh the short term adverse effects Should be instituted in all term/ late preterm infants showing moderate to severe HIE before 6 hours of age
Nassef, S.K., Blennow, M., Jirwe, M. (2012). Experiences of Parents Whose Newborns Undergo Hypothermia Treatment Following Perinatal Asphyxia. JOGNN, 42 (1): 38-47	1	 Reduces risk of death or moderate to severe neurodevelopmental disability in infants cooled who had moderate to severe HIE
Edwards A.D., Azzopardi D.V. (2006). Therapeutic hypothermia following Perinatal asphyxia. <i>Arch DIS Child Fetal</i> <i>Neonatal ED</i> , 91:F127-F131.	11	Reduces the combined chance of death or disability post birth asphyxia
Shankaran S., Lapttok, A.R., Ehrenkranz R.A., Tyson J.E., McDonald S.A., Donovan E.F., Fanaroff A.A., Poole W.K., Wright L.L, Higgins R.D., Finer N.N., Carlo W.A., Duara S., Oh W., Cotton C.M., Stevenson D.K., Stoll B.J., Lemons J.A., Guillet R., Jobe A.H. (2005). Whole-Body Hypothermia for Neonates with Hypoxic-Ischaemic Encephalopathy. <i>N Eng J Med</i> , Oct : 1574- 1584	11	Cooling is safe and effective in reducing risk of death or disability among infants with moderate to severe encephalopathy

Nassef, S.K., Blennow, M., Jirwe, M. (2012).VIExperiences of Parents Whose NewbornsUndergo Hypothermia Treatment FollowingPerinatal Asphyxia. JOGNN, 42 (1): 38-47	 Nurse play important role in supporting parents in their adaptation to the situation of having a baby with moderate to severe HIE that is cooled and helping with bonding and attachment to their baby
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