

Occlusive Wrap Key References

JOURNAL ARTICLES

1. Perlman JM, Wyllie J, Kattwinkel J, Atkins DL, Chameides L, Goldsmith JP, Guinsburg R, Hazinski MF, Morley C, Richmond S, Simon WM, Singhal N, Szyld E, Tamura M, Velaphi S; Neonatal Resuscitation Chapter Collaborators. Neonatal resuscitation: 2010 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. *Pediatrics*. 2010 Nov;126(5):e1319-44. Epub 2010 Oct 18.
2. Vohra S, Roberts RS, Zhang B, Janes M, Schmidt B. Heat Loss Prevention (HeLP) in the delivery room: A randomized controlled trial of polyethylene occlusive skin wrapping in very preterm infants. *J Pediatr*. 2004 Dec;145(6):750-3.
3. Vohra S, Frent G, Campbell V, Abbott M, Whyte R. Effect of polyethylene occlusive skin wrapping on heat loss in very low birth weight infants at delivery: a randomized trial. *J Pediatr*. 1999 May;134(5):547-51.



KEY POINTS

- “A large body of evidence supports the wrapping of newborn infants of <28 weeks’ gestation in polythene wraps or bags at birth without drying to reduce heat loss.”
- The rectal temperature of infants <28 weeks gestation wrapped in occlusive wrap was 0.9 °C higher than non-wrapped infants.
- Using occlusive wrap was well accepted by staff in the NICU during resuscitation.
- Wrapping very preterm infants with polyethylene occlusive wrap at delivery prevents, rather than delays, heat loss.
- Wrapped infants <28 weeks gestation had a mean admission temperature 1.9 °C higher than non-wrapped infants.
- Wrapping very low birth weight or premature infants with occlusive polyethylene at birth reduces postnatal temperature fall.
- Postnatal temperature fall prior to admission to the NICU may increase mortality.
- The intervention is cheap, practical, effective, and does not interfere with current resuscitation practice.

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