

POSITIONING

Supporting information

Inappropriate positioning may cause head molding?

A randomised trial in 126 infants presenting to a plagiocephaly clinic (Hutchison, 2010) compared positioning strategies with positioning plus the use of a Safe T Sleep™ positioning wrap. Head shape was measured using a digital photographic technique, and neck function was assessed. The infants were followed up at home 3, 6 and 12 months later. There was no difference in head shape outcomes for the two treatment groups after 12 months of follow-up, with 42% of infants having head shapes in the normal range by that time. Eighty per cent of children showed good improvement. Those that had poor improvement were more likely to have both plagiocephaly and brachycephaly and to have presented later to clinic.

Hutchison BL, Stewart AW, De Chalain TB, et al. A randomized controlled trial of positioning treatments in infants with positional head shape deformities. *Acta Paediatr* 2010;99:1556-60
<http://onlinelibrary.wiley.com/doi/10.1111/j.1651-2227.2010.01872.x/full>

Evidence Level: I

In small or preterm babies, is there any benefit from monitoring SpO₂ in car seats (“Infant Car Seat Challenge”) before discharging from neonatal unit to prevent breathing difficulties during car travel?

In 2016 the Canadian Pediatric Society reviewed the evidence and concluded that due to inconsistency among Infant Car Seat Challenge (ICSC) test results and the lack of evidence that failing an ICSC is associated with either mortality risk or an adverse neurodevelopmental outcome, the Canadian Paediatric Society cannot recommend administering this test routinely as part of the discharge protocol for preterm infants (Narvey, 2016). Their decision not to recommend routine ICSC testing before discharge for preterm infants was based on evidence from case control studies (DeGrazia 2007, Davis 2014, Schutzman 2013).

DeGrazia M. Stability of the infant car seat challenge and risk factors for oxygen desaturation events. *J Obstet Gynecol Neonatal Nurs* 2007;36:300-7

Davis NL, Gregory ML, Rhein LM. Test-retest reliability of the infant car-seat challenge. *J Perinatol* 2014;34:54-8

Narvey MR; Canadian Paediatric Society, Fetus and Newborn Committee. Assessment of cardiorespiratory stability using the infant car seat challenge before discharge in preterm infants (<37 weeks' gestational age). *Paediatr Child Health*. 2016;21:155-62

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4933079/>

Schutzman DL, Salvador A, Janeczko M, et al. A comparison of the infant car seat challenge and the polysomnogram at the time of hospital discharge. *Arch Dis Child Fetal Neonatal Ed* 2013;98:F411-5

<http://fn.bmj.com/content/98/5/F411.long>

Evidence Level: IV

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