**15 Pain in the Neonate**

**Selected References**

[Baudesson de Chanville A](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Baudesson%20de%20Chanville%20A%5BAuthor%5D&cauthor=true&cauthor_uid=28346843), [Brevaut-Malaty V](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Brevaut-Malaty%20V%5BAuthor%5D&cauthor=true&cauthor_uid=28346843), Garbi A, et al. Analgesic effect of maternal human milk odor on premature neonates: a randomized controlled trial. [*J Hum Lact*.](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/28346843) 2017;33(2):300-308.

Bellieni C, Tei M, Cornacchione S, et al. Pain perception in NICU: a pilot questionnaire. *J Matern Fetal Neonatal Med.* 2018;31(14):1921-1923.

Bouza H. The impact of pain in the immature brain. *J Matern Fetal Neonatal Med.* 2009;22:722-732.

Chen K, Quah-Smith I, Schmölzer GM, et al. Acupuncture in the neonatal intensive care unit-using ancient medicine to help today’s babies: a review. *J Perinatol.* 2017;37:749-756.

[Chen KL](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Chen%20KL%5BAuthor%5D&cauthor=true&cauthor_uid=28741805), [Lindrea KB](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Lindrea%20KB%5BAuthor%5D&cauthor=true&cauthor_uid=28741805), [Quah-Smith I](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Quah-Smith%20I%5BAuthor%5D&cauthor=true&cauthor_uid=28741805), et al. Magnetic noninvasive acupuncture for infant comfort (MAGNIFIC): a single-blinded randomised controlled pilot trial. [*Acta Paediatr*.](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/28741805) 2017;106(11):1780-1786.

Duerden E, Guo T, Dodbiba L, et al. Midazolam dose correlates with abnormal hippocampal growth and neurodevelopmental outcome in preterm infants. *Ann Neurol*. 2016;79:548-559.

Epstein EG. Moral obligations of nurses and physicians in neonatal end-of-life care. *Nurs Ethics*. 2010;17:577-589.

Erkut Z, Yildiz S. The effect of swaddling on pain, vital signs and crying duration during heel lance in newborns. *Pain Manag Nurs.* 2017;18:328-336.

Hall R, Anand KJ. Pain management in newborns. *Clin Perinatol.* 2014;41:895-924.

Harrison D, Loughnan P, Manias E, Johnston L. Utilization of analgesics, sedatives, and pain scores in infants with a prolonged hospitalization: a prospective descriptive cohort study. *Int J Nurs Stud*. 2009;46:624-632.

Johnston C, Campbell-Yeo M, Disher T, et al. Skin-to-skin care for procedural pain in neonates. *Cochrane Database Syst Rev.* 2017;2:CD0088435.

Krishnan L. Pain relief in neonates. *J Neonatal Surg.* 2013;2(2):19.

Lago P, Garetti E, Bellieni CV, et al. Systematic review of nonpharmacological analgesic interventions for common needle-related procedures in newborn infants and development of evidence-based clinical guidelines. *Acta Paediatr.* 2017;106:864-870.

Lim Y, Godambe S. Prevention and management of procedural pain in the neonate: an update, American Academy of Pediatrics, 2016. *Arch Dis Child Educ Pract Ed*. 2017;102:254-256.

[Niemi AK](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Niemi%20AK%5BAuthor%5D&cauthor=true&cauthor_uid=28368368). Review of randomized controlled trials of massage in preterm infants. [*Children (Basel)*.](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/28368368) 2017;4(4):E21.

Pillai Riddell RR, Racine NM, Gennis HG, et al. Non-pharmacological management of infant and young child procedural pain. *Cochrane Database Syst Rev*. 2015;12:CD006275.

[Sacha GL](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Sacha%20GL%5BAuthor%5D&cauthor=true&cauthor_uid=28638303), [Foreman MG](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Foreman%20MG%5BAuthor%5D&cauthor=true&cauthor_uid=28638303), [Kyllonen K](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Kyllonen%20K%5BAuthor%5D&cauthor=true&cauthor_uid=28638303), [Rodriguez RJ](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Rodriguez%20RJ%5BAuthor%5D&cauthor=true&cauthor_uid=28638303). The use of gabapentin for pain and agitation in neonates and infants in a neonatal ICU. *J* [*Pediatr Pharmacol Ther.*](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/28638303) 2017;22(3):207-211.

Shah PS, Herbozo C, Aliwalas LL, et al. Breastfeeding or breast milk for procedural pain in neonates. *Cochrane Database Syst Rev*. 2012;12:CD004950.

[Shah SR](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Shah%20SR%5BAuthor%5D&cauthor=true&cauthor_uid=29144240), [Kadage S](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Kadage%20S%5BAuthor%5D&cauthor=true&cauthor_uid=29144240), [Sinn J](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/?term=Sinn%20J%5BAuthor%5D&cauthor=true&cauthor_uid=29144240). Trial of music, sucrose, and combination therapy for pain relief during heel prick procedures in neonates. [*J Pediatr*.](https://www-ncbi-nlm-nih-gov.proxy1.lib.tju.edu/pubmed/29144240) 2017;190:153-158.

Sharek PJ, Powers R, Koehn A, Anand KJ. Evaluation and development of potentially better practices to improve pain management of neonates. *Pediatrics*. 2006;118(suppl 2):S78-S86.

Slater R, Cornelissen L, Fabrizi L, et al. Oral sucrose as an analgesic drug for procedural pain in newborn infants: a randomized controlled trial. *Lancet*. 2010;376:1225-1232.

Stevens B, Yamada J, Ohlsson A, et al. Sucrose for analgesia in newborn infants undergoing painful procedures. *Cochrane Database Syst Rev.* 2013;1:CD001069.

Walden M, Carrier C. The ten commandments of pain assessment and management in preterm neonates. *Crit Care Nursing Clin North Am*. 2009;21:235-252.

Witt N, Coynor S, Edwards C, Bradshaw H. A guide to pain assessment and management in the neonate. *Curr Emerg Hosp Med Rep.* 2016;4:1-10.

Yamada J, Stinson J, Lamba J, et al. A review of systematic reviews on pain interventions in hospitalized infants. *Pain Res Manag*. 2008;13:413-420.