



CENTER FOR RESEARCH,  
EDUCATION, QUALITY  
AND SAFETY

## ***Extending CPAP Therapy in Stable Preterm Infants to Increase Lung Growth and Function***

### **References**

American Thoracic Society; European Respiratory Society. ATS/ERS statement: raised volume forced expirations in infants: guidelines for current practice. *Am J Respir Crit Care Med.* 2005 Dec 1;172(11):1463-71. doi: 10.1164/rccm.200408-1141ST. PMID: 16301301.

Assaf SJ, Chang DV, Tiller CJ, Kisling JA, Case J, et al. Lung parenchymal development in premature infants without bronchopulmonary dysplasia. *Pediatr Pulmonol.* 2015 Dec;50(12):1313-9. doi: 10.1002/ppul.23134. Epub 2014 Dec 2. PMID: 25462113; PMCID: PMC4452454.

Bamat N, Jensen EA, Kirpalani H. Duration of continuous positive airway pressure in premature infants. *Semin Fetal Neonatal Med.* 2016 Jun;21(3):189-95. doi: 10.1016/j.siny.2016.02.005. Epub 2016 Mar 3. PMID: 26948885; PMCID: PMC4902733.

Bowe L, Clarke P. Current use of nasal continuous positive airways pressure in neonates. *Arch Dis Child Fetal Neonatal Ed.* 2005 Jan;90(1):F92-3. doi: 10.1136/adc.2004.061085. PMID: 15613590; PMCID: PMC1721823.

Carvalho CG, Silveira Rde C, Neto EC, Procianoy RS. Plasma cytokine levels fall in preterm newborn infants on nasal CPAP with early respiratory distress. *PLoS One.* 2015 Mar 23;10(3):e0120486. doi: 10.1371/journal.pone.0120486. PMID: 25799377; PMCID: PMC4370408.

Colnaghi M, Matassa PG, Fumagalli M, Messina D, Mosca F. Pharyngeal pressure value using two continuous positive airway pressure devices. *Arch Dis Child Fetal Neonatal Ed.* 2008 Jul;93(4):F302-4. doi: 10.1136/adc.2007.120428. Epub 2008 Mar 11. PMID: 18334615.

Jardine L, Davies MW. Withdrawal of neonatal continuous positive airway pressure: current practice in Australia. *Pediatr Int.* 2008 Aug;50(4):572-5. doi: 10.1111/j.1442-200X.2008.02617.x. PMID: 19143985.

Jelin EB, Etemadi M, Encinas J, Schecter SC, Chapin C, et al. Dynamic tracheal occlusion improves lung morphometrics and function in the fetal lamb model of congenital diaphragmatic hernia. *J Pediatr Surg.* 2011 Jun;46(6):1150-7. doi: 10.1016/j.jpedsurg.2011.03.049. PMID: 21683214; PMCID: PMC3128884.

Lam R, Schilling D, Scottoline B, Platteau A, Niederhausen M, et al. The Effect of Extended Continuous Positive Airway Pressure on Changes in Lung Volumes in Stable Premature Infants: A Randomized Controlled Trial. *J Pediatr.* 2020 Feb;217:66-72.e1. doi: 10.1016/j.jpeds.2019.07.074. Epub 2019 Sep 10. PMID: 31519441; PMCID: PMC7986570.

Mamidi RR, MacDonald KD, Brumbach BH, Go MDA, McEvoy CT. Nasal continuous positive airway pressure practices in preterm infants: A survey of neonatal providers. *J Neonatal Perinatal Med.* 2023;16(4):611-617. doi: 10.3233/NPM-230006. PMID: 38043019.



CENTER FOR RESEARCH,  
EDUCATION, QUALITY  
AND SAFETY

Rastogi S, Rajasekhar H, Gupta A, Bhutada A, Rastogi D, Wung JT. Factors Affecting the Weaning from Nasal CPAP in Preterm Neonates. *Int J Pediatr*. 2012;2012:416073. doi: 10.1155/2012/416073. Epub 2011 Dec 8. PMID: 22187570; PMCID: PMC3236475.

Rastogi S, Wong W, Gupta A, Bhutada A; Deepa Rastogi; Maimonides Neonatal Group. Gradual versus sudden weaning from nasal CPAP in preterm infants: a pilot randomized controlled trial. *Respir Care*. 2013 Mar;58(3):511-6. doi: 10.4187/respcare.01999. PMID: 22906960.

Stocks J, Hislop A, Sonnappa S. Early lung development: lifelong effect on respiratory health and disease. *Lancet Respir Med*. 2013 Nov;1(9):728-42. doi: 10.1016/S2213-2600(13)70118-8. Epub 2013 Aug 13. PMID: 24429276.

Subramaniam P, Ho JJ, Davis PG. Prophylactic or very early initiation of continuous positive airway pressure (CPAP) for preterm infants. *Cochrane Database Syst Rev*. 2021 Oct 18;10(10):CD001243. doi: 10.1002/14651858.CD001243.pub4. PMID: 34661278; PMCID: PMC8521644.

Vilos GA, Liggins GC. Intrathoracic pressures in fetal sheep. *J Dev Physiol*. 1982 Aug;4(4):247-56. PMID: 7175122.

Xue Z, Zhang L, Ramchandani R, Liu Y, Antony VB, et al. Respiratory system responsiveness in rabbits in vivo is reduced by prolonged continuous positive airway pressure. *J Appl Physiol* (1985). 2005 Aug;99(2):677-82. doi: 10.1152/japplphysiol.00165.2005. Epub 2005 Apr 7. PMID: 15817724.

Zhang S, Garbutt V, McBride JT. Strain-induced growth of the immature lung. *J Appl Physiol* (1985). 1996 Oct;81(4):1471-6. doi: 10.1152/jappl.1996.81.4.1471. PMID: 8904555.