Sleep Publications featuring Sentec's Transcutaneous Monitoring System

At Sentec, we believe research and clinical evidence is a critical component to building effective noninvasive technology. Below is a library of published research for you to explore that highlights the impact our Transcutaneous Monitoring System (TCM) can have when providing less invasive sleep care.

Adult | Pediatric & Neonatal

Engel M., et. al. (2021). Respiratory parameters on diagnostic sleep studies predict survival in patients with amyotrophic lateral sclerosis. *Journal of neurology,* 268(11), 4321–4331.

De Braekeleer, K., & Toussaint, M. (2020). Transcutaneous Carbon Dioxide Measurement in Adult Patients with Neuromuscular Disorders: A quality Level Assessment. *J Neuromuscul Dis*.

Boentert, M. (2019). Sleep disturbances in patients with amyotrophic lateral sclerosis: current perspectives. *Nat Sci Sleep, 11*, 97–111.

Chhajed, P. N., et al. (2016). Utility of Transcutaneous Capnography for Optimization of Non-Invasive Ventilation Pressures. *JCDR, Vol-10 (9)* (September), OC06–OC09.

Bauman, K. A., et al. (2015). Simplified Approach to Diagnosing Sleep-Disordered Breathing and Nocturnal Hypercapnia in Individuals With Spinal Cord Injury. *Arch Phys Med Rehabil, 97(3)*, 363–371.

Viau, F. (2013). Monitorage de la PCO2 transcutanée en médecine du sommeil. *J.msom, 10(4)*, 171–177.

Nardi, J., et al. (2012). Efficiency of invasive mechanical ventilation during sleep in Duchenne muscular dystrophy. *Sleep Med, 13(8)*, 1056–1065.

Soon Kyu Lee, D. -hyun K., et al. (2012). The Significance of Transcutaneous Continuous Overnight CO2 Monitoring in Determining Initial Mechanical Ventilator Application for Patients with Neuromuscular Disease. *ARM, 36(1)*, 126–132.

Storre, J. H., et al. (2012). Impact of long-term target-volume noninvasive positive pressure ventilation on sleep quality. In *European Respiratory Society, Annual Meeting*. ERS.

Stagnara, A., et al. (2011). Faut-il s'intéresser au sommeil des patients polyhandicapés? Should be interested in the sleep of patients with polyhandicap? *Motricité cérébrale, 32(3)*, 98–105.

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Storre, J. H., et al. (2010). Transcutaneous monitoring as a replacement for arterial PCO(2) monitoring during nocturnal non-invasive ventilation. *Respir Med, 105(1),* 143–150.

Storre, J. H., et al. (2010). Transcutaneous PCO2 Monitoring Is Accurate For Assessing PaCO2 During Nocturnal Noninvasive Ventilation. In *Am. J. Respir. Crit. Care Med.* (Vol. 181, A3064).

Stagnara, A., et al. (2010). Enregistrement du Sommeil Chez les Ados Obèses: le Programme Equilibre à la Maisonnée. In *Congrès de Pneumologie de Langue Francaise (CPLF) in Marseille*.

Storre, J. H., et al. (2010). Advantages of transcutaneous PCO2 monitoring over PaCO2 in chronic respiratory failure (CRF). In *European Respiratory Society, Annual Meeting*.

Chung, V., et al. (2007). Obstructive Sleep Apnea in the PACU Following Bariatric Surgery. In *American Society for Bariatric Surgery, Annual Meeting*.

Douglas, C., & Johnson, M. D. (2005). Detection of Hypoventilation. In *Chest.*

Chhajed, P. N., et al. (2004). Comparison of Cutaneous Carbon Dioxide Tension and Oxygen Saturation Measurements Using A New Combined Digital Sensor with Arterial Blood Gas Values. In *American Association for Respiratory Care, Annual Meeting*.

Chhajed, P. N., et al. (2004). Comparison of Cutaneous Carbon Dioxide Tension and Oxygen Saturation Measurements Using A New Combined Digital Sensor with Arterial Blood Gas Values. In *American Thoracic Society, Annual Meeting*.

Adult | **Pediatric & Neonatal**

Griffon, L., et al. (2020). Home Overnight Gas Exchange for Long-Term Noninvasive Ventilation in *Children. Respir Care*.

Shi, J., Chiang, et al. (2020). The Diagnostic Accuracy and Reliability of Transcutaneous Carbon Dioxide Monitoring at Home for Nocturnal Hypoventilation Screening in Children with Neuromuscular Disease.

Tabone, L., et al. (2019). Cerebral Oxygenation During Respiratory Events in Children with Sleep-Disordered Breathing and Associated Disorders. *J Pediatr*.

Amaddeo, A., & Fauroux, B. (2015). Oxygen and carbon dioxide monitoring during sleep. *Paediatr Respir Rev*.

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Caldarelli, V., et al. (2013). Polygraphic respiratory events during sleep with noninvasive ventilation in children: description, prevalence, and clinical consequences. *Intensive Care Med, 39(4)*, 739–746.

Krivec, U., et al. (2012). Nocturnal hypoxemia, but not hypercapnia, correlates with sleep quality in children. *Respir Care, 57(11)*, 1937–1944.

Ramirez, A., et al. (2012). Assessment of sleep quality by pulse wave amplitude and actigraphy in children with sleep-disordered breathing: evaluation at diagnosis and under non-invasive ventilation. *Sleep Breath*.

Fauroux, B., et al. (2012). Sleep quality and nocturnal hypoxaemia and hypercapnia in children and young adults with cystic fibrosis. *Arch Dis Child, 97(11)*, 960–966.

Bersanini, C., et al. (2012). Nocturnal hypoxaemia and hypercapnia in children with neuromuscular disorders. *Eur Respir J, 39(5)*, 1206–1212.

Felemban, O., et al. (2011). Value of gas exchange recording at home in children receiving non-invasive ventilation. *Pediatr Pulmonol, 46(8)*, 802–808.

Paiva, R., et al. (2009). Carbon dioxide monitoring during long-term noninvasive respiratory support in children. *Intensive Care Med, 35(6)*, 1068–1074.

Fauroux, B., et al. (2009). Carbon Dioxide Monitoring During Long Term Noninvasive Ventilation in Children. In *Am J Respir Crit Care Med* (Vol. 179, A3046).

Krivec, U., et al. (2009). Nocturnal Hypoventilation is Associated With Poor Sleep Quality and Increased Pulse Rate Variability in Children. In *European Respiratory Society, Annual Meeting*.

Paiva, R., et al. (2009). Carbon Dioxide Monitoring During Long Term Noninvasive Respiratory Support in Children. In *European Respiratory Society, Annual Meeting*.

David, T., & Stagnara, A. (2006). Reproducibility of PtcCO2 in Pediatrics. In *European Respiratory Care Association Congress*.

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For more information about our Transcutaneous Monitoring System, contact us.