Longer use of breathing device supports lung growth in preterm infants, research finds

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Extending the use of a continuous positive airway pressure (CPAP)

treatment in premature infants by two weeks significantly increases lung volume and lung diffusion capacity, according to a new study. The research will be presented at the Pediatric Academic Societies (PAS) 2024 Meeting, held May 2–6 in Toronto.

CPAP treatment is common for preterm infants with breathing issues, but researchers note there is no consensus on optimal treatment length when the preterm infant is doing well. Preterm birth is the most common cause of altered lung development and breathing issues that can last into adulthood, experts say.

"Extending CPAP treatment may be a simple and safe approach to improving preterm infant lung function and breathing in the absence of a lung growth therapy," said Cindy T. McEvoy, MD, MCR, professor of pediatrics at Oregon Health & Science University and the presenting author.

"The study's findings solidify CPAP treatment as beneficial for preterm infants without requiring pharmaceuticals."

In the study, researchers kept a group of preterm infants on CPAP treatment for an additional two weeks. The study found that patients who received the extra treatment had larger, healthier lungs six months later than those who did not.

Study authors say that the results can help clinicians determine an appropriate length of treatment.

More information: Abstract: Increased Alveolar Volume and Lung Diffusion Capacity in Former Preterm Infants Randomized to Two Extra Weeks of Continuous Positive Airway Pressure (CPAP) in the

NICU

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