EDITOR'S FOCUS -



Ca2+-mediated chloride pathways appear to be enhanced in cystic fibrosis (CF) macrophages compared to wild-type macrophages. This may be a potential mechanism by which macrophages directly contribute to the hyperinflammatory phenotype and airway pathophysiology in CF.

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In a preterm lamb model of neonatal chronic lung disease (CLD), Rehan and colleagues found that high-frequency nasal ventilation (HFNV) enhances homeostatic alveolar epithelial-mesenchymal paracrine signaling, while intermittent mandatory ventilation (IMV) inhibits it. This finding provides a potential molecular mechanism by which "gentler" modes of ventilation reduce neonatal CLD.

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Novel drug- and dose-specific differences were identified in the hemodynamic response to escalating doses of vasoactive medications in the cardiovascular system of neonatal piglets. This may provide useful information for future clinical studies towards improved treatment of neonatal cardiovascular compromise.

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This is the first study to evaluate the effectiveness of human bone marrow-derived mesenchymal stem cells (hBM-MSCs) in a rat model of necrotizing enterocolitis (NEC). MSCs reduced histopathological damage significantly.

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Fat mass (FM) and fat-free mass (FFM) was assessed within 48 hours of birth on 350 Ethiopian newborns using air displacement plethysmography (ADP). These reference data provide background information for further longitudinal studies on the relation between fetal body composition, childhood growth, and adult disease.

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Genetic variation in *IL19/IL20* and other adaptive immunity genes appears to be associated with the development of recurrent wheeze following lower respiratory tract infection with respiratory syncytial virus.

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