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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – October, 2017

[The beneficial effects of melatonin administration following hypoxia-ischemia in preterm fetal sheep](#)

Yawno T, Mahen M, Li J, et al. *Front Cell Neurosci*.

In the current study, the authors determined if melatonin (MLT), a potent anti-oxidant hormone with anti-apoptotic and anti-inflammatory properties, could restore white matter brain development when administered after an acute hypoxic ischemic (HI) insult in preterm fetal sheep. HI increased apoptotic cell death and activated microglia and oxidative stress within the subventricular and subcortical white matter, while MLT diminished these effects. MLT increased oligodendrocyte cell number within the periventricular white matter, improved myelin density within the subcortical striatal white matter, and improved neuronal survival within the cortex. MLT appears safe and may provide region-specific neuroprotection within the white matter of preterm infants.

[Volume-targeted versus pressure-limited ventilation in neonates](#)

Klingenberg C, Wheeler KI, McCallion N, et al. *Cochrane Database Syst Rev*.

Lung over-distension is implicated in the development of BPD. To determine whether volume tidal ventilation (VTV) compared with pressure-limited ventilation (PLV) reduces rates of death and death or BPD in newborn infants, the authors examined trials comparing VTV versus PLV in infants < 44 weeks postmenstrual age. In the 20 trials examined, there was no difference in death before hospital discharge, between modes. There was moderate quality evidence that VTV modes reduced death or BPD, rates of pneumothorax, mean days of mechanical ventilation, rates of hypocarbia, rates of grade 3 or 4 intraventricular hemorrhage, and the combined outcome of periventricular leukomalacia.

[Continuous glucose monitoring in very preterm infants: a randomized controlled trial](#)

Galderisi A, Facchinetti A, Steil GM, et al. *Pediatrics*.

Impaired glucose control in very preterm infants is associated with increased morbidity, mortality, and poor neurologic outcome. The authors sought to assess whether glucose administration guided by continuous glucose monitoring (CGM) is more effective than standard of care blood glucose monitoring in maintaining euglycemia in very preterm infants. Fifty newborns ≤ 32 weeks' gestation or with a birth weight ≤ 1500 g were randomly assigned (1:1) within 48-hours from birth to receive computer-guided glucose infusion rate with or without CGM. In preterm infants during the first week of life, CGM-guided glucose titration successfully increased the time spent in euglycemic range, reduced hypoglycemia, and minimized glycemic variability.

[Protective effects of amniotic fluid in the setting of necrotizing enterocolitis](#)

Dasgupta S & Jain SK. *Pediatr Res*.

In this review article, the role of various trophic factors and cytokines in the development of intestine is explored along with the role of decreasing/preventing NEC by providing trophic factors via supplementing amniotic fluid. Presence of antimicrobial proteins and peptides, suppression of TLR4 signaling, and growth factors that protect against gut injury are all mechanisms that have been shown to protect against NEC.

[Feasibility and physiological effects of noninvasive neurally adjusted ventilatory assist in preterm infants \(PDF\)](#)

Gibu CK, Cheng PY, Ward RJ, et al. *Pediatr Res*.

In a pilot randomized, controlled observational crossover study, the physiological effect of NIV-NAVA was compared to NIMV during 2h steady state conditions. NIV-NAVA produced significant reductions (as a percentage of measurements on NIMV) in the following: PIP, 13%; FiO₂, 13%; frequency of desaturations, 42%; length of desaturations, 32% and phasic Edi, 19%.

[Using exhaled CO₂ to guide initial respiratory support at birth: a randomised controlled trial](#)

Ngan AY, Cheung PY, Hudson-Mason A, et al. *Arch Dis Child Fetal Neonatal Ed*.

This prospective study randomized 162 infants between 23+0 and 32+6 weeks gestation to receive either sustained inflation (PIP=24 cmH₂O for 20 seconds with additional sustained inflation guided by exhaled CO₂) or PPV (PIP=24 cmH₂O) at delivery. The authors found that the two groups had similar rates of BPD (sustained inflation=23% vs PPV=33%, p=0.090) but that the duration of mechanical ventilation was significantly reduced in the sustained inflation group (PPV=63 (range 10-246) hours vs. sustained inflation=204 (range 17-562) hours (p=0.045)). The authors conclude that exhaled CO₂-guided sustained inflation is a feasible strategy.

[Caffeine decreases intermittent hypoxia in preterm infants nearing term-equivalent age](#)

Dobson NR, Rhein LM, Darnall RA, et al. *J Perinatol*.

This study examined 27 infants born <32 weeks treated with caffeine citrate (14 or 20 mg/kg) at 36 weeks PMA after clinical caffeine was discontinued. Infants were followed with continuous pulse oximetry and compared to 53 control infants. The authors found that caffeine doses of 14 to 20 mg/kg/day were sufficient to maintain caffeine concentrations >20 µg/ml and significantly reduce intermittent hypoxia in preterm infants at 36 to 38 weeks PMA.

[Early brain imaging in infants may help predict autism](#)

Hampton T. *JAMA*.

Infants at high familial risk of autism spectrum disorder (ASD) do not typically exhibit symptoms in their first year of life. An estimated 1 in 5 infants who have an older sibling with ASD develop the condition, compared with approximately 1 in 100 in the general population. Because the defining features of ASD tend to emerge over the latter part of the first year and into the second year, a diagnosis is not typically made until 24 months of age and beyond. MRI scans from 6 and 12 months could predict with high accuracy [81% positive predictive value and 88% sensitivity] 8 out of 10 infants who would go on to meet criteria for autism at 24 months of age. Prospective neuroimaging findings suggest increased cerebral cortical growth (hyperproliferation of neural progenitor cells) between 6 and 12 months of age may predict autism diagnosis at 24 months of age.

OTHER NOTEWORTHY PUBLICATIONS – October, 2017

Pediatrics

National trends in pediatricians' practices and attitudes about breastfeeding: 1995 to 2014

<https://www.ncbi.nlm.nih.gov/pubmed/28924062>

Employer-sponsored plan expenditures for infants born preterm

<https://www.ncbi.nlm.nih.gov/pubmed/28933347>

Neurodevelopment of HIV-exposed and HIV-unexposed uninfected children at 24 months

<https://www.ncbi.nlm.nih.gov/pubmed/28912368>

Pulse oximetry and auscultation for congenital heart disease detection

<https://www.ncbi.nlm.nih.gov/pubmed/28939700>

Gestational age and outcomes in critical congenital heart disease

<https://www.ncbi.nlm.nih.gov/pubmed/28885171>

Rapid targeted genomics in critically ill newborns

<https://www.ncbi.nlm.nih.gov/pubmed/28939701>

Chronic auditory toxicity in late preterm and term infants with significant hyperbilirubinemia

<https://www.ncbi.nlm.nih.gov/pubmed/28954873>

Pediatrician competency in breastfeeding support has room for improvement

<https://www.ncbi.nlm.nih.gov/pubmed/28924061>

Contribution of cost of preterm infants to the total cost of infant health care in the United States

<https://www.ncbi.nlm.nih.gov/pubmed/28933346>

Ending the culture of culture-negative sepsis in the neonatal ICU

<https://www.ncbi.nlm.nih.gov/pubmed/28928289>

Sustaining SLUG bug CLABSI reduction: does sterile tubing change technique really work?

<https://www.ncbi.nlm.nih.gov/pubmed/28951441>

Case report of clitoral hypertrophy in 2 extremely premature girls with an ovarian cyst

<https://www.ncbi.nlm.nih.gov/pubmed/28931575>

Journal of Pediatrics

Can we prevent bronchopulmonary dysplasia?

<https://www.ncbi.nlm.nih.gov/pubmed/28947055>

Moving beyond "abstinence-only" messaging to reduce sleep-related infant deaths

<https://www.ncbi.nlm.nih.gov/pubmed/28838726>

High flow nasal cannula flow rates: new data worth the weight

<https://www.ncbi.nlm.nih.gov/pubmed/28807356>

Leisure time physical activity in young adults born preterm

<https://www.ncbi.nlm.nih.gov/pubmed/28751124>

Using functional magnetic resonance imaging to detect preserved function in a preterm infant with brain injury

<https://www.ncbi.nlm.nih.gov/pubmed/28735979>

Maternal caffeine consumption during pregnancy and behavioral disorders in 11-year-old offspring: a Danish national birth cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/28732651>

Prostaglandin E1-induced periostitis and reversibility with discontinuation

<https://www.ncbi.nlm.nih.gov/pubmed/28709628>

Impact of enteroviral polymerase chain reaction testing on length of stay for infants 60 days old or younger

<https://www.ncbi.nlm.nih.gov/pubmed/28705656>

Solving the extubation equation: successfully weaning infants born extremely preterm from mechanical ventilation

<https://www.ncbi.nlm.nih.gov/pubmed/28705653>

The microbiome and biomarkers for necrotizing enterocolitis: are we any closer to prediction?

<https://www.ncbi.nlm.nih.gov/pubmed/28669607>

In quest of epinephrine's optimal route and dose in neonatal cardiopulmonary resuscitation-are we there yet?

<https://www.ncbi.nlm.nih.gov/pubmed/28668448>

Short-, medium-, and long-term assessment of pulmonary dysfunction in extremely low birth weight neonates

<https://www.ncbi.nlm.nih.gov/pubmed/28625500>

The impact of routine evaluation of gastric residual volumes on the time to achieve full enteral feeding in preterm infants

<https://www.ncbi.nlm.nih.gov/pubmed/28625498>

Changes in the diagnosis and management of patent ductus arteriosus from 2006 to 2015 in United States neonatal intensive care units

<https://www.ncbi.nlm.nih.gov/pubmed/28600155>

Markers of successful extubation in extremely preterm infants, and morbidity after failed extubation (PDF)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5657557/pdf/nihms912201.pdf>

Muehrcke lines in an infant

<https://www.ncbi.nlm.nih.gov/pubmed/28595765>

Pediatric Research

Executive function and extremely preterm children

<https://www.ncbi.nlm.nih.gov/pubmed/28853724>

Developing a neonatal acute kidney injury research definition: a report from the NIDDK neonatal AKI workshop

<https://www.ncbi.nlm.nih.gov/pubmed/28604760>

Diagnostics for neonatal sepsis: current approaches and future directions

<https://www.ncbi.nlm.nih.gov/pubmed/28574980>

Cognitive functioning at the age of 10 years among children born extremely preterm: a latent profile approach

<https://www.ncbi.nlm.nih.gov/pubmed/28582386>

Investigating the effects of cerebrospinal fluid removal on cerebral blood flow and oxidative metabolism in infants with post-hemorrhagic ventricular dilatation

<https://www.ncbi.nlm.nih.gov/pubmed/28553990>

Histone deacetylase adaptation in single ventricle heart disease and a young animal model of right ventricular hypertrophy

<https://www.ncbi.nlm.nih.gov/pubmed/28549058>

The impact of intrauterine and extrauterine weight gain in premature infants on later body composition

<https://www.ncbi.nlm.nih.gov/pubmed/28678222>

Exposure to acetaminophen and all its metabolites upon 10, 15, and 20 mg/kg intravenous acetaminophen in very-preterm infants

<https://www.ncbi.nlm.nih.gov/pubmed/28553988>

Neuroimaging in former preterm children who received erythropoiesis stimulating agents

<https://www.ncbi.nlm.nih.gov/pubmed/28553989>

Both antenatal and postnatal inflammation contribute information about the risk of brain damage in extremely preterm newborns

<https://www.ncbi.nlm.nih.gov/pubmed/28549057>

Antenatal corticosteroids and cardiometabolic outcomes in adolescents born with very low birth weight

<https://www.ncbi.nlm.nih.gov/pubmed/28574979>

Intrauterine growth retardation-associated syncytin B hypermethylation in maternal rat blood revealed by DNA methylation array analysis

<https://www.ncbi.nlm.nih.gov/pubmed/28604758>

Time to lung aeration during a sustained inflation at birth is influenced by gestation in lambs

<https://www.ncbi.nlm.nih.gov/pubmed/28604757>

Archives of Disease in Childhood - Fetal & Neonatal Edition

Providing active antenatal care depends on the place of birth for extremely preterm births: the EPIPAGE 2 cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/28667191>

Changes in cardiac output and cerebral oxygenation during prone and supine sleep positioning in healthy term infants

<https://www.ncbi.nlm.nih.gov/pubmed/28747363>

Abstention or intervention for isolated hypotension in the first 3 days of life in extremely preterm infants: association with short-term outcomes in the EPIPAGE 2 cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/28302697>

A first-in-human clinical study of a new SP-B and SP-C enriched synthetic surfactant (CHF5633) in preterm babies with respiratory distress syndrome (PDF)

<http://fn.bmj.com/content/102/6/F497.full.pdf>

Emergency laparotomy in infants born at <26 weeks gestation: a neonatal network-based cohort study of frequency, surgical pathology and outcomes

<https://www.ncbi.nlm.nih.gov/pubmed/28468896>

Short-term and long-term outcomes of preterm neonates with acute severe pulmonary hypertension following rescue treatment with inhaled nitric oxide

<https://www.ncbi.nlm.nih.gov/pubmed/28483819>

Newborn infants with bilious vomiting: a national audit of neonatal transport services

<https://www.ncbi.nlm.nih.gov/pubmed/28483818>

Contribution of targeted saliva screening for congenital CMV-related hearing loss in newborns who fail hearing screening

<https://www.ncbi.nlm.nih.gov/pubmed/28468898>

Severe retinopathy of prematurity predicts delayed white matter maturation and poorer neurodevelopment

<https://www.ncbi.nlm.nih.gov/pubmed/28536205>

Dextrose gel treatment does not impair subsequent feeding

<https://www.ncbi.nlm.nih.gov/pubmed/28536206>

Review: How to feed a baby recovering from necrotising enterocolitis when maternal milk is not available

<https://www.ncbi.nlm.nih.gov/pubmed/28780499>

Review: Inotropes for preterm babies during the transition period after birth: friend or foe?

<https://www.ncbi.nlm.nih.gov/pubmed/28818851>

Review: Epidemiology, management and outcome of ultrashort bowel syndrome in infancy (PDF)

<http://fn.bmj.com/content/102/6/F551.full.pdf>

Journal of Perinatology

The role of near-infrared spectroscopy monitoring in preterm infants

<https://www.ncbi.nlm.nih.gov/pubmed/28471443>

Approaches to end-of-life discussions with parents of a profoundly compromised newborn

<https://www.ncbi.nlm.nih.gov/pubmed/28984877>

Autoimmune conditions and comorbid depression in pregnancy: examining the risk of preterm birth and preeclampsia

<https://www.ncbi.nlm.nih.gov/pubmed/28749487>

'The obesity paradox': a reconsideration of obesity and the risk of preterm birth

<https://www.ncbi.nlm.nih.gov/pubmed/28749482>

Risk of nonsteroidal anti-inflammatory drug-associated renal dysfunction among neonates diagnosed with patent ductus arteriosus and treated with gentamicin

<https://www.ncbi.nlm.nih.gov/pubmed/28594394>

Neonatal outcomes based on mode and intensity of delivery room resuscitation

<https://www.ncbi.nlm.nih.gov/pubmed/28682316>

A management strategy that reduces NICU admissions and decreases charges from the front line of the neonatal abstinence syndrome epidemic (PDF)

<http://www.nature.com/jp/journal/v37/n10/pdf/jp2017101a.pdf>

Congenital syphilis in neonates with nonreactive nontreponemal test results

<https://www.ncbi.nlm.nih.gov/pubmed/28682315>

Evaluation of critical congenital heart defects screening using pulse oximetry in the neonatal intensive care unit (PDF)

<http://www.nature.com/jp/journal/v37/n10/pdf/jp2017105a.pdf>

Neonatal abstinence syndrome and early childhood morbidity and mortality in Washington state: a retrospective cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/28682319>

Surgical site infections in neonates are independently associated with longer hospitalizations

<https://www.ncbi.nlm.nih.gov/pubmed/28749483>

Neurodevelopmental outcomes of preterm infants resuscitated with different oxygen concentration at birth

<https://www.ncbi.nlm.nih.gov/pubmed/28594395>

Communication-related allegations against physicians caring for premature infants

<https://www.ncbi.nlm.nih.gov/pubmed/28749484>

Improvements in the delivery of resuscitation and newborn care after Helping Babies Breathe training

<https://www.ncbi.nlm.nih.gov/pubmed/28726790>

Identifying a quality improvement project

<https://www.ncbi.nlm.nih.gov/pubmed/28837135>

Neonatology

Reliability and validity of a smartphone-paired pulse oximeter for screening of critical congenital heart defects in newborns

<https://www.ncbi.nlm.nih.gov/pubmed/28768288>

NICU human milk dose and 20-month neurodevelopmental outcome in very low birth weight infants

<https://www.ncbi.nlm.nih.gov/pubmed/28768286>

Chest compressions during sustained inflations improve recovery when compared to a 3:1 compression:ventilation ratio during cardiopulmonary resuscitation in a neonatal porcine model of asphyxia

<https://www.ncbi.nlm.nih.gov/pubmed/28768280>

Saline enemas versus glycerin suppositories to promote enteral feeding in premature infants: a pilot randomized controlled trial

<https://www.ncbi.nlm.nih.gov/pubmed/28768263>

A potential role for the NOD1 variant (rs6958571) in gram-positive blood stream infection in ELBW infants

<https://www.ncbi.nlm.nih.gov/pubmed/28768269>

Abnormal interhemispheric synchrony in neonatal hypoxic-ischemic encephalopathy: a retrospective pilot study

<https://www.ncbi.nlm.nih.gov/pubmed/28796992>

Clinical outcome for congenital diaphragmatic hernia at the age of 1 year in the era of fetal intervention

<https://www.ncbi.nlm.nih.gov/pubmed/28866670>

Heme oxygenase activity and heme binding in a neonatal mouse model

<https://www.ncbi.nlm.nih.gov/pubmed/28926834>

A distinctive ictal amplitude-integrated electroencephalography pattern in newborns with neonatal epilepsy associated with KCNQ2 mutations

<https://www.ncbi.nlm.nih.gov/pubmed/28926830>

Are all amplitude-integrated electroencephalogram systems equal

<https://www.ncbi.nlm.nih.gov/pubmed/28926828>

Persistent pulmonary hypertension of the newborn In twin-twin transfusion syndrome: a case-control study

<https://www.ncbi.nlm.nih.gov/pubmed/28926832>

American Journal of Perinatology

Internal audit of the Canadian Neonatal Network data collection system

<https://www.ncbi.nlm.nih.gov/pubmed/28499309>

Outcome of neonates with meconium aspiration syndrome at the University Hospital of the West Indies, Jamaica: a resource-limited setting

<https://www.ncbi.nlm.nih.gov/pubmed/28499308>

Antenatal exposure to magnesium sulfate and spontaneous intestinal perforation and necrotizing enterocolitis in extremely preterm neonates

<https://www.ncbi.nlm.nih.gov/pubmed/28494498>

Effect of anatomical and developmental factors on the risk of unplanned extubation in critically ill newborns

<https://www.ncbi.nlm.nih.gov/pubmed/28494497>

Normal left ventricular size in premature newborns by the echocardiographic bullet method

<https://www.ncbi.nlm.nih.gov/pubmed/28437826>

Comparison of intact parathyroid hormone, alkaline phosphatase, phosphate levels for diagnosing severe metabolic bone disease in infants with severe bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/28431438>

Noninvasive ventilation in newborns \leq 1,500 g after tracheal extubation: randomized clinical trial

<https://www.ncbi.nlm.nih.gov/pubmed/28420011>

Antibiotics prescriptions in the neonatal intensive care unit: how to overcome everyday challenges

<https://www.ncbi.nlm.nih.gov/pubmed/28395369>

One less painful procedure: using umbilical cord blood as alternative source to admission complete blood count

<https://www.ncbi.nlm.nih.gov/pubmed/28395365>

Neurodevelopmental outcomes of preterm infants treated with oral paracetamol versus ibuprofen for patent ductus arteriosus

<https://www.ncbi.nlm.nih.gov/pubmed/28395364>

Journal of Neonatal-Perinatal Medicine

Readmission for neonatal hyperbilirubinemia in an area with a high prevalence of glucose-6-phosphate dehydrogenase deficiency: a hospital-based retrospective study

<https://www.ncbi.nlm.nih.gov/pubmed/28409762>

The question of whether or not to perform therapeutic hypothermia: a case of neonatal spinal cord injury

<https://www.ncbi.nlm.nih.gov/pubmed/28409761>

Delivery room continuous positive airway pressure and early pneumothorax in term newborn infants

<https://www.ncbi.nlm.nih.gov/pubmed/28409760>

Influence of central hemodynamics on VV ECMO oxygen delivery in neonatal animal model

<https://www.ncbi.nlm.nih.gov/pubmed/28409759>

Improving neonatal intubation safety: a journey of a thousand miles

<https://www.ncbi.nlm.nih.gov/pubmed/28409758>

Standardized slow enteral feeding protocol reduces necrotizing enterocolitis in micropremies

<https://www.ncbi.nlm.nih.gov/pubmed/28409756>

Serum cytokine concentrations, chorioamnionitis and the onset of bronchopulmonary dysplasia in premature infants

<https://www.ncbi.nlm.nih.gov/pubmed/28409755>

The clinical utility of anthropometric measures to assess adiposity in a cohort of prematurely born infants: correlations with MRI fat quantification

<https://www.ncbi.nlm.nih.gov/pubmed/28409754>

Short term cost of care for the surviving periviable neonate

<https://www.ncbi.nlm.nih.gov/pubmed/28409753>

Early appearance of tuberous sclerosis complex on cerebral ultrasound in extremely preterm infant

<https://www.ncbi.nlm.nih.gov/pubmed/28409752>

Early extubation failure in very low birth weight infants: clinical outcomes and predictive factors

<https://www.ncbi.nlm.nih.gov/pubmed/28409751>

Maternal Health, Neonatology and Perinatology

Continuous glucose monitoring in neonates: a review

<https://www.ncbi.nlm.nih.gov/pubmed/29051825>

Neoreviews

Developmental care for preemies and their families: one neonatologist's journey toward NIDCAP practice

<http://neoreviews.aappublications.org/content/18/10/e568>

Addictive disorders in women: the impact of maternal substance use on the fetus and newborn

<http://neoreviews.aappublications.org/content/18/10/e576>

Hearing loss in the newborn infant: early hearing detection and intervention

<http://neoreviews.aappublications.org/content/18/10/e587>

Optimizing neurodevelopment in severe bronchopulmonary dysplasia

<http://neoreviews.aappublications.org/content/18/10/e598>

Case 1: Term newborn with purple rash at birth

<http://neoreviews.aappublications.org/content/18/10/e606>

Case 2: Newborn with persistent apnea

<http://neoreviews.aappublications.org/content/18/10/e609>

Case 3: Term neonate with respiratory distress

<http://neoreviews.aappublications.org/content/18/10/e611>

Strip of the Month: Minimum variability and meconium

<http://neoreviews.aappublications.org/content/18/10/e618>

A crying neonate

<http://neoreviews.aappublications.org/content/18/10/e615>

Skin lesions in a preterm infant

<http://neoreviews.aappublications.org/content/18/10/e629>

JAMA Pediatrics

Global prevalence of fetal alcohol spectrum disorder among children and youth: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/28828483>

Use of oxyhemoglobin saturation, rather than oxygen tension, as a marker of oxygenation in cyanotic patients

<https://www.ncbi.nlm.nih.gov/pubmed/28828474>

Influenza A infections in infants of vaccinated and unvaccinated mothers

<https://www.ncbi.nlm.nih.gov/pubmed/28783813>

Comparative safety of antiretroviral treatment regimens in pregnancy

<https://www.ncbi.nlm.nih.gov/pubmed/28783807>

Association of neonatal glycemia with neurodevelopmental outcomes at 4.5 years

<https://www.ncbi.nlm.nih.gov/pubmed/28783802>

BMC Pediatrics

Knowledge, attitudes, and practices of pediatricians on infantile colic in the Middle East and North Africa region

<https://www.ncbi.nlm.nih.gov/pubmed/29058577>

Pediatric Critical Care Medicine

Promoters and barriers to implementation of tracheal intubation airway safety bundle: a mixed-method analysis

<https://www.ncbi.nlm.nih.gov/pubmed/28654550>

New England Journal of Medicine

Ventilation in preterm infants and lung function at 8 years

<https://www.ncbi.nlm.nih.gov/pubmed/29048138>

Ventilation in preterm infants and lung function at 8 years

<https://www.ncbi.nlm.nih.gov/pubmed/29048140>

Ventilation in preterm infants and lung function at 8 years

<https://www.ncbi.nlm.nih.gov/pubmed/29045214>

Ventilation in preterm infants and lung function at 8 years

<https://www.ncbi.nlm.nih.gov/pubmed/29045215>

Lancet

Evolution, human-microbe interactions, and life history plasticity

<https://www.ncbi.nlm.nih.gov/pubmed/28792414>

Human reproduction and health: an evolutionary perspective

<https://www.ncbi.nlm.nih.gov/pubmed/28792413>

Continuing debate about method of delivery and pregnancy outcomes: a 2010 Lancet article

<https://www.ncbi.nlm.nih.gov/pubmed/28792398>

Breastfeeding: a missed opportunity for global health

<https://www.ncbi.nlm.nih.gov/pubmed/28792384>

Charlie Gard and the limits of medicine

<https://www.ncbi.nlm.nih.gov/pubmed/28792383>

JAMA

Early brain imaging in infants may help predict autism

<https://www.ncbi.nlm.nih.gov/pubmed/28973228>

BMJ

Follow-up brain imaging of 37 children with congenital Zika syndrome: case series study

<https://www.ncbi.nlm.nih.gov/pubmed/29030384>

New cerebral findings in infants with congenital Zika syndrome

<https://www.ncbi.nlm.nih.gov/pubmed/29038290>

Diagnosis and management of cystic fibrosis: summary of NICE guidance

<https://www.ncbi.nlm.nih.gov/pubmed/29074599>

Pediatric Infectious Disease Journal

Serious bacterial infections in hospitalized febrile infants in the first and second months of life

<https://www.ncbi.nlm.nih.gov/pubmed/28471863>

Newborn congenital cytomegalovirus screening based on clinical manifestations and evaluation of DNA-based assays for in vitro diagnostics

<https://www.ncbi.nlm.nih.gov/pubmed/28471866>

Genotype characterization of group B streptococcus isolated from infants with invasive diseases in South Korea

<https://www.ncbi.nlm.nih.gov/pubmed/28060047>

Cardio-respiratory events and inflammatory response after primary immunization in preterm infants < 32 weeks gestational age: a randomized controlled study

<https://www.ncbi.nlm.nih.gov/pubmed/28654562>

Pediatric Cardiology

Postnatal outcomes of fetal supraventricular tachycardia: a multicenter study

<https://www.ncbi.nlm.nih.gov/pubmed/28664446>

Pediatric cardiology provider attitudes about palliative care: a multicenter survey study

<https://www.ncbi.nlm.nih.gov/pubmed/28664445>

Transfer of neonates with critical congenital heart disease within a regionalized network

<https://www.ncbi.nlm.nih.gov/pubmed/28711963>

Lower hospital charges and societal costs for catheter device closure of atrial septal defects

<https://www.ncbi.nlm.nih.gov/pubmed/28681132>

Genetic testing protocol reduces costs and increases rate of genetic diagnosis in infants with congenital heart disease

<https://www.ncbi.nlm.nih.gov/pubmed/28725922>

Regression of neonatal cardiac rhabdomyoma in two months through low-dose everolimus therapy: a report of three cases

<https://www.ncbi.nlm.nih.gov/pubmed/28780710>

Chronic low dose prostaglandin and neonatal heart block

<https://www.ncbi.nlm.nih.gov/pubmed/28508920>

Critically underdeveloped left heart morphology associated with prematurity and low birth weight: conditional staged rehabilitation towards biventricular repair and time-related growth of left heart structures

<https://www.ncbi.nlm.nih.gov/pubmed/28762164>

Pediatric Neurology

Developing the brain-early illustrations of cerebral cortex and its gyri

<https://www.ncbi.nlm.nih.gov/pubmed/28864080>

Utility of the autism observation scale for infants in early identification of autism in tuberous sclerosis complex

<https://www.ncbi.nlm.nih.gov/pubmed/28844798>

Eye-hand-mouth coordination in the human newborn

<https://www.ncbi.nlm.nih.gov/pubmed/28823631>

Clinical metabolomics to segregate aromatic amino acid decarboxylase deficiency from drug-induced metabolite elevations (PDF)

[http://www.pedneur.com/article/S0887-8994\(17\)30483-6/pdf](http://www.pedneur.com/article/S0887-8994(17)30483-6/pdf)

Novel PEX26 mutation causing Zellweger syndrome presenting as feeding intolerance and hypotonia

<https://www.ncbi.nlm.nih.gov/pubmed/28823628>

An infant with epilepsy and recurrent hemiplegia due to compound heterozygous variants in ATP1A2

<https://www.ncbi.nlm.nih.gov/pubmed/28811059>

Severe brain malformations in an infant with pyruvate dehydrogenase deficiency and Down syndrome

<https://www.ncbi.nlm.nih.gov/pubmed/28784285>

Clinical and histologic findings in ACTA1-related nemaline myopathy: case series and review of the literature

<https://www.ncbi.nlm.nih.gov/pubmed/28780987>

Obstetrics and Gynecology

Early second-trimester fetal growth restriction and adverse perinatal outcomes

<https://www.ncbi.nlm.nih.gov/pubmed/28885423>

Perinatal and maternal outcomes after training residents in forceps before vacuum instrumental birth

<https://www.ncbi.nlm.nih.gov/pubmed/28937553>

Domperidone for lactation: what health care providers really should know

<https://www.ncbi.nlm.nih.gov/pubmed/28486375>

Obstetric care consensus no. 6 summary: Periviable birth

<https://www.ncbi.nlm.nih.gov/pubmed/28937567>

Committee opinion no. 722 summary: Marijuana use during pregnancy and lactation

<https://www.ncbi.nlm.nih.gov/pubmed/28937569>

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Multivitamin use and adverse birth outcomes in high-income countries: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/28377269>

Evidence that fetal death is associated with placental aging

<https://www.ncbi.nlm.nih.gov/pubmed/28645573>

Successful maintenance of key physiological parameters in preterm lambs treated with ex vivo uterine environment therapy for a period of 1 week

<https://www.ncbi.nlm.nih.gov/pubmed/28646647>

Assessing the potential impact of extending antenatal steroids to the late preterm period

<https://www.ncbi.nlm.nih.gov/pubmed/28455087>

Neonatal outcomes in fetuses with cardiac anomalies and the impact of delivery route

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Maternal marijuana use, adverse pregnancy outcomes, and neonatal morbidity

<https://www.ncbi.nlm.nih.gov/pubmed/28578174>

BASIC SCIENCE SELECTIONS

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Pastuszko P, Schears GJ, Kubin J, et al. *Interact Cardiovasc Thorac Surg*.

<http://www.ncbi.nlm.nih.gov/pubmed/28962511>

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<http://www.ncbi.nlm.nih.gov/pubmed/29047087>

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Sharp GC, Salas LA, Monnereau C, et al. *Hum Mol Genet*.

<http://www.ncbi.nlm.nih.gov/pubmed/29016858>

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Oei JL, Finer NN, Saugstad OD, et al. *Arch Dis Child Fetal Neonatal Ed*.

<http://www.ncbi.nlm.nih.gov/pubmed/28988158>

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<http://www.ncbi.nlm.nih.gov/pubmed/29019855>

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<http://www.ncbi.nlm.nih.gov/pubmed/28969546>

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