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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – March 2020

[Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records](#)

Chen H, Guo J, Wang C, et al. *Lancet*.

The authors present a retrospective cohort of nine pregnant women with COVID-19 pneumonia admitted to Zhongnan Hospital, Wuhan, China, in January 2020. These patients presented with fever (7 of 9), and had cough (4 of 9), myalgia (3 of 9), sore throat, malaise and fetal distress (2 of 9). Laboratory findings include lymphopenia (5 of 9), and increased aminotransferase levels (3 of 9). All nine patients had a cesarean section in the third trimester with livebirths. Amniotic fluid, cord blood, neonatal throat swabs, and breastmilk samples from six patients tested negative for SARS-CoV-2. This small cohort of patients shows no evidence of vertical transmission in women who developed COVID-19 in late pregnancy.

[Tracheostomy in very low birth weight infants: A prospective multicenter study](#)

Han SM, Watters KF, Hong CR, et al. *Pediatrics*.

This prospective study included 458,624 VLBW infants at 796 North American centers from 2006 to 2016, of which 3442 infants received tracheostomy. The authors found that VLBW infants receiving tracheostomy had a mortality rate twice as high (18.8% with tracheostomy versus 8.3% without tracheostomy) and an initial length of stay (LOS) nearly 4 times longer than those without tracheostomy (Median LOS=226 days (168-304 days interquartile range) with tracheostomy versus LOS=58 (39-86 days interquartile range) without tracheostomy). Chronic lung disease and congenital anomalies were the strongest predictors of tracheostomy placement and mortality.

[Milrinone use in persistent pulmonary hypertension of the newborn](#)

Qasim A and Jain S.K. *Neoreviews*.

While inotropic and vasoactive agents are commonly initiated early in the treatment of persistent pulmonary hypertension, there is scant evidence on choice, timing of initiation, dosing, monitoring, and titrating of these agents in the newborn population. This review article discusses the pathophysiology of persistent pulmonary hypertension of the newborn and reviews the use of inotropic, lusitropic (myocardial relaxing), and vasoactive agents in the management of pulmonary hypertension, with particular attention to milrinone.

[Outcomes of neonates born at <26 weeks gestational age who receive extensive cardiopulmonary resuscitation compared with airway and breathing support](#)

Shukla V, Elkhateeb O, Shah PS, et al. *J Perinatol*.

This is a retrospective of Canadian Neonatal Network data (2010-2016) comparing the outcomes of preterm infants <26weeks gestation that required extensive post-delivery cardiopulmonary resuscitation (ECPR) versus airway and breathing support (ABS). The results show that out of 3633 infants, 433 (11.9%) received ECPR. Death or severe morbidity (IVH \geq grade 3, PVL, ROP \geq stage 3, BPD, or NEC) was higher in ECPR versus ABS group (adjusted OR 2.26) which included increased mortality in the first week of life. The authors conclude that this study provides valuable prognostic information.

[Longer duration of kangaroo care improves neurobehavioral performance and feeding in preterm infants: a randomized controlled trial](#)

El-Farrash RA, Shinkar DM, Ragab DA, et al. *Pediatr Res*.

In a randomized control, the authors randomized 120 preterm infants to receive either conventional care (controls) or KC (kangaroo care) for 60 or 120 min. Outcomes measured were changes in vital signs, salivary cortisol levels and measures evaluated by Neonatal Intensive Care Unit Network Neurobehavioral Scale (NNS). Preterm neonates who received KC for long durations reached full enteral feeds faster, had better breastfeeding success, neurobehavioral performance, thermal control, and tissue oxygenation. Salivary cortisol decreased in both KC groups compared with controls after 7 days.

[Intermittent CPAP limits hyperoxia induced lung damage in a rabbit model of bronchopulmonary dysplasia.](#)

Gie AG, Salaets T, Vignero J et al. *Am J Physiol Lung Cell Mol Physiol*.

The authors sought to identify the functional and structural effects of CPAP in the preterm hyperoxia rabbit model of BPD. They found that just 4 hours of CPAP daily increased alveolar recruitment and limited the structural effect of hyperoxia in the respiratory epithelium and pulmonary arteries while improving lung function and mitigating hyperoxia-associated changes to respiratory resistance, tissue damping, and tissue elastance.

[Factors associated with neurodevelopmental impairment in bronchopulmonary dysplasia](#)

Bauer SE, Schneider L, Lynch SK, et al. *J Pediatr*.

The authors sought to identify factors associated with neurodevelopmental impairment (NDI) in patients with bronchopulmonary dysplasia (BPD). They identified 151 patients with moderate to severe BPD from 2010 to 2014 with complete Bayley Scales of Infant Development (BSID) scores at 24 months corrected age (NDI was defined as any diagnosis of cerebral palsy or \geq 1 BSID composite scores of <80). They found that the majority of their patients had no NDI and that low birth weight and length of hospital stay were associated with increased risk of developing NDI. This finding suggests that there are potentially modifiable factors associated with better neurodevelopmental outcomes in patients with BPD that deserve further study.

[Designation of neonatal levels of care: a review of state regulatory and monitoring policies](#)

Kroelinger CD, Okoroh EM, Goodman DA, et al. *J Perinatol*.

The authors sought to summarize policies on levels of neonatal care designation among 50 states and District of Columbia (DC) by systematically reviewing publicly available, web-based information on levels of neonatal care designation policies for each state/DC. Information on designating authorities, designation oversight, licensure requirement, and ongoing monitoring for designated levels of care were abstracted from 2019 published rules, statutes, and regulations. Limited direct oversight influences regulation of regionalized systems, potentially impacting facility service monitoring and consequent management of vulnerable infants.

[Screening for early onset neonatal sepsis: NICE guidance-based practice versus projected application of the Kaiser Permanente sepsis risk calculator in the UK population](#)

Goel N, Shrestha S, Smith R, et al. *Arch Dis Child Fetal Neonatal Ed.*

Eight birthing hospitals in Wales, UK, prospectively collected complete data on 3593 births ≥ 34 weeks over 3 months. The population was managed following NICE guidelines for early onset sepsis. Data and decisions were compared to the Kaiser Permanente Sepsis Risk Calculator (SRC). Following NICE guidelines, 16% of patients were started on antibiotics while SRC recommended antibiotics in only 4.3% of infants. 99.8% of infants who avoided antibiotics with NICE would have also avoided antibiotics with SRC. 54.5% of infants who received antibiotics with NICU would have been assigned to normal care with SRC. There were no positive blood cultures among patients who got antibiotics with NICE but would not have with SRC. The authors conclude that adoption of the SRC could safely reduce early antibiotic use among neonates in the UK.

[Achieved oxygen saturations and retinopathy of prematurity in extreme preterms](#)

Gantz MG, Carlo WA, Finer NN, et al. *Arch Dis Child Fetal Neonatal Ed.*

Secondary analysis of the SUPPORT trial compared oxygen use and actual infant saturation to severe ROP outcomes in a group of extremely premature infants. Pulse oximetry data were recorded every 10s until 36 weeks or when stable in room air. Severe ROP patients were more premature, had lower birth weight, and were more likely to have comorbidities. The authors use a logistic regression model to report the relationship between achieved saturation and severe ROP. They found risk of ROP depends on the timing and duration of supplemental oxygen. Increased time on oxygen with saturation 91-96% during weeks 1-5 was associated with increased risk of ROP for infants who used oxygen > 2 weeks. There was also increased risk of ROP for infants who had saturation 97-100% and at > 3 weeks of oxygen use from week 6 to 9.

COVID-19

Neonatal resuscitation and postresuscitation care of infants born to mothers with suspected or confirmed SARS-CoV-2 infection.

<https://www.ncbi.nlm.nih.gov/pubmed/32268381>

Neonatal management during the coronavirus disease (COVID-19) outbreak: the Chinese experience

<https://neoreviews.aappublications.org/page/neo.21-5-e293>

Neonatal early-onset infection with SARS-CoV-2 in 33 neonates born to mothers with COVID-19 in Wuhan, China.

<https://www.ncbi.nlm.nih.gov/pubmed/32215598>

Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records

<https://www.ncbi.nlm.nih.gov/pubmed/32151335>

Coronavirus disease 2019 (COVID-19) and pregnancy: What obstetricians need to know

[https://www.ajog.org/article/S0002-9378\(20\)30197-6/fulltext](https://www.ajog.org/article/S0002-9378(20)30197-6/fulltext)

Clinical characteristics of novel coronavirus disease 2019 (COVID-19) in newborns, infants and children

<https://www.ncbi.nlm.nih.gov/pubmed/32199864>

Novel coronavirus infection in hospitalized infants under 1 year of age in China

<https://www.ncbi.nlm.nih.gov/pubmed/32058570>

SARS-CoV-2 infection in children

<https://www.ncbi.nlm.nih.gov/pubmed/32187458>

Epidemiology of COVID-19 among children in China

<https://www.ncbi.nlm.nih.gov/pubmed/32179660>

Pediatrics

Factors associated with choice of infant sleep location

<https://www.ncbi.nlm.nih.gov/pubmed/32034081>

Maternal drinking and child emotional and behavior problems

<https://www.ncbi.nlm.nih.gov/pubmed/32094288>

Tracheostomy in very low birth weight infants: A prospective multicenter study

<https://www.ncbi.nlm.nih.gov/pubmed/32098788>

Journal of Pediatrics

Improving our understanding of rare neonatal diseases: Neonatal arteriovenous brain malformations with cardiac failure

<https://www.ncbi.nlm.nih.gov/pubmed/32089171>

Mothers' knowledge about congenital cytomegalovirus infection is associated with desire for infants' screening

<https://www.ncbi.nlm.nih.gov/pubmed/32089174>

Breastfeeding, baby-friendly, and safety: getting the balance right

<https://www.ncbi.nlm.nih.gov/pubmed/31810631>

Trends in breastfeeding interventions, skin-to-skin care, and sudden infant death in the first 6 days after birth

<https://www.ncbi.nlm.nih.gov/pubmed/31753326>

Outcomes from the centers for disease control and prevention 2018 breastfeeding report card: public policy implications

<https://www.ncbi.nlm.nih.gov/pubmed/31623856>

Factors associated with neurodevelopmental impairment in bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/31926665>

Prenatal exposure to tobacco and offspring neurocognitive development in the healthy start study

<https://www.ncbi.nlm.nih.gov/pubmed/31759580>

Reducing tobacco smoke exposure in high-risk infants: a randomized, controlled trial

<https://www.ncbi.nlm.nih.gov/pubmed/31870605>

Latent class analysis of low birth weight and preterm delivery among Australian women

<https://www.ncbi.nlm.nih.gov/pubmed/31955875>

Racial and ethnic disparities in human milk intake at neonatal intensive care unit discharge among very low birth weight infants in California

<https://www.ncbi.nlm.nih.gov/pubmed/31843218>

Management and outcomes of neonatal arteriovenous brain malformations with cardiac failure: A 17 years' experience in a tertiary referral center

<https://www.ncbi.nlm.nih.gov/pubmed/31870606>

Clinically asymptomatic sleep-disordered breathing in infants with single-ventricle physiology

<https://www.ncbi.nlm.nih.gov/pubmed/31952850>

A cross-sectional study of caregiver perceptions of congenital cytomegalovirus infection: knowledge and attitudes about screening

<https://www.ncbi.nlm.nih.gov/pubmed/31952844>

Tracheomegaly among extremely preterm infants on prolonged mechanical ventilation

<https://www.ncbi.nlm.nih.gov/pubmed/31711760>

Pediatric Research

Maternal hyperoxygenation for the human fetus: should studies be curtailed?

<https://www.ncbi.nlm.nih.gov/pubmed/31600768>

Premature birth impacts bolus size and shape through nursing in infant pigs

<https://www.ncbi.nlm.nih.gov/pubmed/31645052>

Mercury, lead, and cadmium exposure via red blood cell transfusions in preterm infants

<https://www.ncbi.nlm.nih.gov/pubmed/31649339>

Longer duration of kangaroo care improves neurobehavioral performance and feeding in preterm infants: a randomized controlled trial

<https://www.ncbi.nlm.nih.gov/pubmed/31493775>

Pharmacokinetics and short-term safety of the selective NOS inhibitor 2-iminobiotin in asphyxiated neonates treated with therapeutic hypothermia

<https://www.ncbi.nlm.nih.gov/pubmed/31578035>

Inter-rater reliability of the modified Sarnat examination in preterm infants at 32–36 weeks' gestation

<https://www.nature.com/articles/s41390-019-0562-x>

Sleep macro-architecture and micro-architecture in children born preterm with sleep disordered breathing

<https://www.ncbi.nlm.nih.gov/pubmed/31195406>

Appearance of sleep cycling after birth in term neonates: an electro-physiologic study

<https://www.ncbi.nlm.nih.gov/pubmed/31493770>

Clinical quantification of SpO₂ instability using a new histogram classification system: a clinical study

<https://www.ncbi.nlm.nih.gov/pubmed/31539898>

Psychosocial and medical adversity associated with neonatal neurobehavior in infants born before 30 weeks gestation

<https://www.ncbi.nlm.nih.gov/pubmed/31600769>

Bilirubin level 1 week after hepatopertoenterostomy predicts native liver survival in biliary atresia

<https://www.ncbi.nlm.nih.gov/pubmed/31618755>

Electrical activity of the diaphragm following a loading dose of caffeine citrate in ventilated preterm infants

<https://www.ncbi.nlm.nih.gov/pubmed/31622975>

Electroencephalographic functional connectivity in extreme prematurity: a pilot study based on graph theory

<https://www.ncbi.nlm.nih.gov/pubmed/31726463>

Assessment of adrenal function at birth using adrenal glucocorticoid precursor to product ratios to predict short-term neonatal outcomes

<https://www.ncbi.nlm.nih.gov/pubmed/31645056>

Cervical ribs and other abnormalities of the vertebral pattern in children with esophageal atresia and anorectal malformations

<https://www.ncbi.nlm.nih.gov/pubmed/31645054>

Archives of Disease in Childhood - Fetal & Neonatal Edition

Editorial- Neonatal sepsis evaluation across the pond

<https://www.ncbi.nlm.nih.gov/pubmed/31806664>

** Screening for early onset neonatal sepsis: NICE guidance-based practice versus projected application of the Kaiser Permanente sepsis risk calculator in the UK population

<https://fn.bmj.com/content/fetalneonatal/105/2/118.full.pdf>

Haemodynamic effects of premedication for neonatal intubation: an observational study

<https://www.ncbi.nlm.nih.gov/pubmed/31036701>

Sequential co-enrolment in randomised trials in neonatal intensive care medicine

<https://www.ncbi.nlm.nih.gov/pubmed/31154419>

Neuron-specific enolase is correlated with lesion topology, relative infarct volume and outcome of symptomatic NAIS

<https://www.ncbi.nlm.nih.gov/pubmed/31201253>

Achieved oxygen saturations and retinopathy of prematurity in extreme preterms

<https://www.ncbi.nlm.nih.gov/pubmed/31229956>

Improving incidence trends of severe intraventricular haemorrhages in preterm infants <32 weeks gestation: a cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/31201252>

Methadone, Pierre Robin sequence and other congenital anomalies: case-control study

<https://www.ncbi.nlm.nih.gov/pubmed/31229957>

Trends in sex-specific differences in outcomes in extreme preterms: progress or natural barriers?

<https://www.ncbi.nlm.nih.gov/pubmed/31186268>

Neonatal lung ultrasonography to evaluate need for surfactant or mechanical ventilation: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/31248960>

Improving infant outcomes through implementation of a family integrated care bundle including a parent supporting mobile application

<https://www.ncbi.nlm.nih.gov/pubmed/31227521>

Congenital duodenal obstruction in the UK: a population-based study

<https://fn.bmj.com/content/fetalneonatal/105/2/178.full.pdf>

Genetic background of high blood pressure is associated with reduced mortality in premature neonates

<https://fn.bmj.com/content/fetalneonatal/105/2/184.full.pdf>

Active perinatal care of preterm infants in the German Neonatal Network

<https://www.ncbi.nlm.nih.gov/pubmed/31248963>

Randomised trial of estimating oral endotracheal tube insertion depth in newborns using suprasternal palpation of the tip or weight

<https://www.ncbi.nlm.nih.gov/pubmed/31248962>

Effect of intrapartum antibiotics on the intestinal microbiota of infants: a systematic review

<https://www.ncbi.nlm.nih.gov/pubmed/31296695>

Resuscitation of preterm infants in the Philippines: a national survey of resources and practice

<https://fn.bmj.com/content/fetalneonatal/105/2/209.full.pdf>

Reporting of offspring data in diabetes, HIV infection and hypertension trials during pregnancy: a systematic review

<https://www.ncbi.nlm.nih.gov/pubmed/31597728>

Accuracy of real-time delivery room resuscitation documentation

<https://www.ncbi.nlm.nih.gov/pubmed/30472661>

Therapeutic hypothermia for mild neonatal encephalopathy: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/30567775>

Neonatal asymmetrical vulvar hypertrophy: a neonatal manifestation of 'classic' prepubertal vulvar fibroma?

<https://www.ncbi.nlm.nih.gov/pubmed/31362939>

Intrauterine foot necrosis in a preterm baby

<https://www.ncbi.nlm.nih.gov/pubmed/31719142>

Journal of Perinatology

Comment - Why so little progress in regionalization of perinatal care when transport of high-risk neonates remains a substantial risk?

<https://www.ncbi.nlm.nih.gov/pubmed/31996764>

Anomalies of the oral cavity in newborns

<https://www.ncbi.nlm.nih.gov/pubmed/31925320>

Designation of neonatal levels of care: a review of state regulatory and monitoring policies

<https://www.ncbi.nlm.nih.gov/pubmed/31570793>

Clinical deterioration during neonatal transport in California

<https://www.ncbi.nlm.nih.gov/pubmed/31488902>

Do transport factors increase the risk of severe brain injury in outborn infants <33 weeks gestational age?

<https://www.ncbi.nlm.nih.gov/pubmed/31427782>

Neonatal transport in California: findings from a qualitative investigation

<https://www.ncbi.nlm.nih.gov/pubmed/31270432>

Differential effects of delivery hospital on mortality and morbidity in minority premature and low birth weight neonates

<https://www.ncbi.nlm.nih.gov/pubmed/31235781>

Obstetrician–gynecologists’ practice patterns related to opioid use during pregnancy and postpartum—United States, 2017

<https://www.ncbi.nlm.nih.gov/pubmed/31616051>

Obstetrician–gynecologists’ practices and attitudes on substance use screening during pregnancy

<https://www.ncbi.nlm.nih.gov/pubmed/31666646>

Hypothermia among neonates admitted to the neonatal unit at a tertiary hospital in South Africa

<https://www.ncbi.nlm.nih.gov/pubmed/31666645>

The effect of nuchal cord on perinatal mortality and long-term offspring morbidity

<https://www.ncbi.nlm.nih.gov/pubmed/31595022>

Short-term outcomes of HIV-exposed and HIV-unexposed preterm, very low birthweight neonates: a longitudinal, hospital-based study

<https://www.ncbi.nlm.nih.gov/pubmed/31673041>

Disparities in the use of antenatal corticosteroids among women with hypertension in North Carolina

<https://www.ncbi.nlm.nih.gov/pubmed/31767978>

Neonatal abstinence syndrome management in California birth hospitals: results of a statewide survey

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7042156/pdf/41372_2019_Article_568.pdf

Birth and early developmental screening outcomes associated with cannabis exposure during pregnancy

<https://www.ncbi.nlm.nih.gov/pubmed/31911642>

Outcomes of neonates born at <26 weeks gestational age who receive extensive cardiopulmonary resuscitation compared with airway and breathing support

<https://www.ncbi.nlm.nih.gov/pubmed/31911647>

Impact of erythrocyte long-chain omega-3 polyunsaturated fatty acid levels in early pregnancy on birth outcomes: findings from a Belgian cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/31913325>

Low prevalence of clinical decision support to calculate caloric and fluid intake for infants in the neonatal intensive care unit

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7042157/pdf/41372_2019_Article_546.pdf

The importance of shared decision-making in the neonatal intensive care unit

<https://www.ncbi.nlm.nih.gov/pubmed/31570796>

Echocardiographic predictors of acute kidney injury in neonates with a patent ductus arteriosus

<https://www.ncbi.nlm.nih.gov/pubmed/31767977>

Effect of fluctuation of oxygenation on the development of severe retinopathy of prematurity in extremely preterm infants

<https://www.ncbi.nlm.nih.gov/pubmed/31907394>

Is there a role for therapeutic hypothermia administration in term infants with mild neonatal encephalopathy?

<https://www.ncbi.nlm.nih.gov/pubmed/31767982>

The Golden Hour: a quality improvement initiative for extremely premature infants in the neonatal intensive care unit

<https://www.ncbi.nlm.nih.gov/pubmed/31712659>

Journal Club - Is routine evaluation of gastric residuals for premature infants safe or effective?

<https://www.ncbi.nlm.nih.gov/pubmed/31911644>

Is SMOF lipid emulsion better than soy-based lipid emulsion for low birth weight preterm neonates?

<https://www.ncbi.nlm.nih.gov/pubmed/31959905>

Response to Letter to the Editor from Kunal Gupta MBBS, MD: Is SMOF lipid emulsion better than soy-based lipid emulsion for low birth weight preterm neonates?

<https://www.ncbi.nlm.nih.gov/pubmed/31959906>

American Journal of Perinatology

Does prepregnancy weight or maternal BMI at betamethasone administration impact late preterm respiratory morbidity?

<https://www.ncbi.nlm.nih.gov/pubmed/31529450>

Immediate and sustained effect of neonatal teaching in a perinatal setting in urban Laos

<https://www.ncbi.nlm.nih.gov/pubmed/30722073>

Electronic fetal monitoring and neonatal outcomes when a nuchal cord is present at delivery

<https://www.ncbi.nlm.nih.gov/pubmed/30818403>

Maternal and infant adverse outcomes associated with mild and severe preeclampsia during the first year after delivery in the United States

<https://www.ncbi.nlm.nih.gov/pubmed/30780187>

Comparison of endotracheal reintubation between nasal high-frequency oscillation and continuous positive airway pressure in neonates

<https://www.ncbi.nlm.nih.gov/pubmed/30780186>

Use of point-of-care gastric pH testing to assess the efficacy of acid suppression therapy in the neonatal intensive care unit

<https://www.ncbi.nlm.nih.gov/pubmed/30780184>

Sentinel 1: two-season study of respiratory syncytial virus hospitalizations among U.S. infants born at 29 to 35 weeks' gestational age not receiving immunoprophylaxis

<https://www.ncbi.nlm.nih.gov/pubmed/30991438>

Achieving baby-friendly designation at a large metropolitan center

<https://www.ncbi.nlm.nih.gov/pubmed/30818402>

Neoreviews

Perspectives: The flipped classroom in graduate medical education

<https://neoreviews.aappublications.org/content/21/3/e150>

Inhaled nitric oxide in emergency medical transport of the newborn

<https://neoreviews.aappublications.org/content/21/3/e157>

Milrinone use in persistent pulmonary hypertension of the newborn

<https://neoreviews.aappublications.org/content/21/3/e165>

Quality improvement in congenital heart surgery

<https://neoreviews.aappublications.org/content/21/3/e179>

Case 1: Preterm neonate with persistent respiratory distress despite interventions

<https://neoreviews.aappublications.org/content/21/3/e193>

Case 2: GATA6 mutation responsible for multiple congenital anomalies in 2 siblings

<https://neoreviews.aappublications.org/content/21/3/e196>

Strip of the month: Early fetal growth restriction

<https://neoreviews.aappublications.org/content/21/3/e203>

Visual diagnosis: Neonate with hanging facial mass

<https://neoreviews.aappublications.org/content/21/3/e210>

Video corner: An infant with blue spells during feeding

<https://neoreviews.aappublications.org/content/21/3/e213>

JAMA Pediatrics

C-reactive protein testing in late-onset neonatal sepsis: hazardous waste

<https://www.ncbi.nlm.nih.gov/pubmed/32011645>

Neurodevelopmental abnormalities associated with in utero Zika virus infection in infants and children—the unfolding story

<https://www.ncbi.nlm.nih.gov/pubmed/31904764>

Assessment of C-reactive protein diagnostic test accuracy for late-onset infection in newborn infants: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/32011640>

Neurodevelopmental abnormalities in children with in utero Zika virus exposure without congenital Zika syndrome

<https://www.ncbi.nlm.nih.gov/pubmed/31904798>

Association of maternal psychological distress with in utero brain development in fetuses with congenital heart disease

<https://www.ncbi.nlm.nih.gov/pubmed/31930365>

Malaria antigen shedding in the breast milk of mothers from a region with endemic malaria

<https://www.ncbi.nlm.nih.gov/pubmed/31904860>

BMC Pediatrics

Lifetime patient outcomes and healthcare utilization for Bronchopulmonary dysplasia (BPD) and extreme preterm infants: a microsimulation study (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02037-5>

Meconium peritonitis resulting from different etiologies in siblings: a case report (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-2016-3>

Perinatal asphyxia and its associated factors in Ethiopia: a systematic review and meta-analysis (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-020-02039-3>

Pediatric Critical Care Medicine

Necrotizing enterocolitis and associated mortality in neonates with congenital heart disease: a multi-institutional study

<https://www.ncbi.nlm.nih.gov/pubmed/31568264>

Nosocomial infections during extracorporeal membrane oxygenation in neonatal, pediatric, and adult patients: a comprehensive narrative review

<https://www.ncbi.nlm.nih.gov/pubmed/31688809>

New England Journal of Medicine

Images in clinical medicine: “Coat Hanger” appearance of the ribs

<https://www.nejm.org/doi/full/10.1056/NEJMicm1910897>

Lancet

Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records

<https://www.ncbi.nlm.nih.gov/pubmed/32151335>

JAMA

Diagnostic yield of newborn screening for biliary atresia using direct or conjugated bilirubin Measurements

<https://www.ncbi.nlm.nih.gov/pubmed/32207797>

BMJ

Covid-19: what treatments are being investigated?

<https://www.bmj.com/content/bmj/368/bmj.m1252.full.pdf>

Pediatric Infectious Disease Journal

Neonatal outcomes following culture-negative late-onset sepsis among preterm infants

<https://www.ncbi.nlm.nih.gov/pubmed/32032307>

Noma Neonatorum: A unique presentation of sepsis in neonates

<https://www.ncbi.nlm.nih.gov/pubmed/31738323>

Rhizopus infection in a preterm infant: A novel use of Posaconazole

<https://www.ncbi.nlm.nih.gov/pubmed/32084112>

Simulated comparison of a bayesian clinical decision support system versus standard of care for achieving gentamicin pharmacokinetic targets in neonates

<https://www.ncbi.nlm.nih.gov/pubmed/32032171>

Long-term incidence of infectious-related hospitalizations of offspring born to mothers with intrauterine device

<https://www.ncbi.nlm.nih.gov/pubmed/31929381>

Congenital cytomegalovirus and autoimmune neutropenia: cause or coincidence?

<https://www.ncbi.nlm.nih.gov/pubmed/31990888>

Pediatric Neurology

Compliance with standard therapies and remission rates after implementation of an infantile spasms management guideline

<https://www.ncbi.nlm.nih.gov/pubmed/31911027>

Obstetrics and Gynecology

Editorial: Fetoscopic tracheal occlusion for severe congenital diaphragmatic hernia: the state of the evidence

<https://www.ncbi.nlm.nih.gov/pubmed/32028510>

Single-center outcome of fetoscopic tracheal balloon occlusion for severe congenital diaphragmatic hernia

<https://www.ncbi.nlm.nih.gov/pubmed/32028493>

Effect of delayed cord clamping on umbilical blood gas values in term newborns: a systematic review

<https://www.ncbi.nlm.nih.gov/pubmed/32028488>

Maternal sense of control during childbirth and infant feeding method

<https://www.ncbi.nlm.nih.gov/pubmed/32028504>

Umbilical cord abnormalities and stillbirth

<https://www.ncbi.nlm.nih.gov/pubmed/32028503>

Placental growth factor and the risk of adverse neonatal and maternal outcomes

<https://www.ncbi.nlm.nih.gov/pubmed/32028495>

American Journal of Obstetrics & Gynecology

The impact of occupational activities during pregnancy on pregnancy outcomes: a systematic review and metaanalysis

<https://www.ncbi.nlm.nih.gov/pubmed/31550447>

Placental growth factor predicts time to delivery in women with signs or symptoms of early preterm preeclampsia: a prospective multicenter study

[https://www.ajog.org/article/S0002-9378\(19\)31108-1/fulltext](https://www.ajog.org/article/S0002-9378(19)31108-1/fulltext)

The impact of maternal pre pregnancy impaired fasting glucose on preterm birth and large for gestational age: a large population-based cohort study

[https://www.ajog.org/article/S0002-9378\(19\)31166-4/fulltext](https://www.ajog.org/article/S0002-9378(19)31166-4/fulltext)

Coronavirus disease 2019 (COVID-19) and pregnancy: What obstetricians need to know

[https://www.ajog.org/article/S0002-9378\(20\)30197-6/fulltext](https://www.ajog.org/article/S0002-9378(20)30197-6/fulltext)

BASIC SCIENCE SELECTIONS

Is umbilical cord blood therapy an effective treatment for early lung injury in growth restriction?

Allison BJ, Youn H, Malhotra A, et al. Front Endocrinol (Lausanne).

<https://www.ncbi.nlm.nih.gov/pubmed/32194502>

Intermittent CPAP limits hyperoxia induced lung damage in a rabbit model of bronchopulmonary dysplasia

Gie AG, Salaets T, Vignero J, et al. Am J Physiol Lung Cell Mol Physiol.

<https://www.ncbi.nlm.nih.gov/pubmed/32186390>

Early predictors of perinatal brain damage: the role of neurobiomarkers

Bersani I, Pluchinotta F, Dotta A, et al. Clin Chem Lab Med.

<https://www.ncbi.nlm.nih.gov/pubmed/31851609>

Maternal vitamin D deficiency causes sustained impairment of lung structure and function and increases susceptibility to hyperoxia-induced lung injury in infant rats

Mandell E, Ryan S, Seedorf GJ, et al. Am J Respir Cell Mol Biol.

<https://www.ncbi.nlm.nih.gov/pubmed/32135073>

Oxygen and mechanical ventilation impede the functional properties of resident lung mesenchymal stromal cells

Moreira AG, Siddiqui SK, Macias R, et al. PLoS One.

<https://www.ncbi.nlm.nih.gov/pubmed/32142526>

Alteration in the time and/or mode of delivery differentially modulates early development in mice

Chiesa M1, Ferrari DC2 and Ben-Ari Y. Mol Brain.

<https://www.ncbi.nlm.nih.gov/pubmed/32151280>

Proteomic identification of early urinary-biomarkers of acute kidney injury in preterm infants

Jung YH, Han D, Shin SH, et al. Sci Rep.

<https://www.ncbi.nlm.nih.gov/pubmed/32132597>

ADDITIONAL JOURNAL SELECTIONS

Is low-grade intraventricular hemorrhage in very preterm infants an innocent condition? Structural and functional evaluation of the brain reveals regional neurodevelopmental abnormalities

Argyropoulou MI, Astrakas LG, Xydis VG, et al. AJNR Am J Neuroradiol.

<https://www.ncbi.nlm.nih.gov/pubmed/32054617>

Neurodevelopmental outcomes following intravitreal bevacizumab injection in Japanese preterm infants with type 1 retinopathy of prematurity

Arima M, Akiyama M, Fujiwara K, et al. PLoS One.

<https://www.ncbi.nlm.nih.gov/pubmed/32196539>

Effect of synthetic vitamin A and probiotics supplementation for prevention of morbidity and mortality during the neonatal period. A systematic review and meta-analysis of studies from low- and middle-income countries

Imdad A, Rehman F, Davis E, et al. Nutrients.

<https://www.ncbi.nlm.nih.gov/pubmed/32192165>

Maternal prenatal stress is associated with altered uncinate fasciculus microstructure in premature neonates

Lautarescu A, Pecheva D, Nosarti C, et al. Biol Psychiatry.

<https://www.ncbi.nlm.nih.gov/pubmed/31604519>

Clinical utility of echocardiography in former preterm infants with bronchopulmonary dysplasia

Nawaytou H, Steurer MA, Zhao Y, et al. J Am Soc Echocardiogr.

<https://www.ncbi.nlm.nih.gov/pubmed/31948712>