Publications Working Group
Ayan Rajgarhia, Page Editor - Children's Mercy Hospital
Jayasree Nair - University at Buffalo
Craig Nankervis - Nationwide Children's Hospital
Christopher Rouse - The Elliot Hospital + USUHS
Jeffrey Shenberger - Brenner Children's Hospital/Wake Forest School of Medicine
Mark Weems - University of Tennessee Health Science Center
Ranjith Kamity - NYU Winthrop Hospital

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – January 2021

Early assessment of lung aeration using an ultrasound score as a biomarker of developing bronchopulmonary dysplasia: a prospective observational study
Oulego-Erroz I, Alonso-Quintela P, Terroba-Seara S, et al. *J Perinatol.*

In this study, preterm infants born <32 weeks were evaluated with lung ultrasound (LUS) on days 7 and 28. The US assessed 4 zones in each lung. Lung aeration in each zone was scored from 0 (normal) to 3 (extended consolidations). Scores were totaled for a range 0-24. 42 patients were included, 29 with no or mild BPD and 13 with moderate to severe BPD. The BPD group had higher LUS scores at both 7 and 28 days. The authors identified an optimal cutoff score of ≥8 at 7 days to predict moderate-severe BPD. Both intra- and inter-observer agreement in LUS scores was high. The authors conclude that LUS on day 7 may be used to predict moderate-severe BPD in preterm infants, and they suggest it may help identify patients who will benefit from BPD prevention strategies.

A randomized trial of intravenous acetaminophen versus indomethacin for treatment of hemodynamically significant PDAs in VLBW infants
Davidson JM, Ferguson J, Ivey E, et al. *J Perinatol.*

Preterm infants born 22-32 weeks were randomized to 1st PDA treatment with IV acetaminophen or IV indomethacin. Enrollment was open to patients ≤21 days of age. Acetaminophen dosing was 15mg/kg IV q6 hours x3 days (12 doses). Indomethacin dosing was 0.2-0.25 mg/kg IV every 12 hours for 3 doses. 37 patients were included with mean gestational age of 25 weeks and mean birth weight 0.77kg. Treatment was generally started from day 4-11. Only 1 patient in the acetaminophen group had successful closure of the PDA and nearly half were later treated with transcatheter PDA closure. 55% of the indomethacin group had successful closure and only 15% received transcatheter closure. The authors conclude the studied dose of IV acetaminophen was not as successful at closing the PDA as IV indomethacin.

Amniotic fluid IL-6 and IL-8 are superior predictors of fetal lung injury compared to maternal or fetal plasma cytokines or placental histopathology in a nonhuman primate model
McCartney SA, Kapur R, Liggitt HD, et al. *Am J Obstet Gynecol.*

Using a pregnant nonhuman primate model of GBS infection, the authors sought to determine if fetal lung injury is best predicted by placental histopathology or the cytokine response. They found that fetal lung injury score was significantly correlated with peak amniotic fluid cytokines IL-6 and IL-8 and that fetal lung scores were poorly correlated with maternal and fetal plasma cytokine levels and placental

pathology. The authors speculate that amniocentesis may predict neonatal lung morbidity intra-amniotic infection.

Vancomycin-lock therapy for prevention of catheter-related bloodstream infection in very low body weight infants
Liang H, Zhang L, Guo X, et al. *BMC Pediatr.*

This study evaluated the effectiveness and safety of vancomycin- lock therapy for the prevention of catheter-related bloodstream infection (CRBSI) in VLBW infants. They found that the rate of CRBSI in the vancomycin-lock group (4.4%) was significantly less than in the control group (21.7%). Total antibiotic exposure time during the whole observation period was significantly shorter in the group than in the control. The authors conclude that vancomycin-lock may effectively prevent CRBSI in Chinese VLBW infants and reduce the exposure time of antibiotics.

Outcomes in infants < 29 weeks of gestation following single-dose prophylactic indomethacin
Gillam-Krakauer M, Slaughter JC, Cotton RB, et al. *J Perinatol.*

This was a single unit retrospective cohort analysis in <29 week infants, evaluating the effect of single-dose indomethacin (SD-INDO) on PDA, IVH and motor function. 299 infants who received SD-INDO were compared to 85 infants who did not, in the same time period (2007-2014). Infants who received SD-INDO were more premature but had lower odds of PDA, PDA receiving treatment, death, and CP severity. There was less IVH, when adjusted for gestational age. The authors concluded that a single dose of indomethacin at 12 h of age was associated with short- and long-term benefits in very premature infants, specifically decreased PDA and CP severity and improved survival.

Associations between red blood cell and platelet transfusions and retinopathy of prematurity
Hengartner T, Adams M, Pfister RE, et al. *Neonatology.*

In this retrospective, national, case-control study all preterm infants <28 weeks GA born in Switzerland between 2013 and 2018 who developed higher stage ROP (≥stage 2, n = 178) were compared to gestation and sex matched controls without ROP (n = 178). The aim of this study was to examine associations between transfusion of RBC or platelets (PLTs) and development of retinopathy of prematurity (ROP). Severe ROP was associated with the number of RBC transfusions per infant (OR= 1.081, 95% CI 1.020–1.146, p = 0.008) and the number of infants who received at least 1 PLT transfusion (OR = 2.502, 95% CI 1.566–3.998, p < 0.001). RBC transfusion volumes were less strongly associated (OR = 1.001, 95% CI 1.000–1.002, p = 0.182) and were, therefore, a worse predictor than the number of RBC transfusions. The authors conclude that multiple RBC and PLT transfusions are associated with higher stage ROP development, but further prospective studies are required to explore this association further.

High early parenteral lipid in very preterm infants: a randomized-controlled trial
Alburaki W, Yusuf K, Dobry J, et al. *J Pediatr.*

In this randomized controlled trial the authors sought to determine whether high early parenteral soybean oil lipid intake in very low birth weight (VLBW) infants in the first week after birth decreases the proportion of weight loss and subsequently the incidence of extrauterine growth restriction (EUGR). Lipid intake in the control group was started at 0.5-1 g/kg per day and increased daily by 0.5-1 g/kg per day till reaching 3 g/kg per day while the intervention group was started on 2 g/kg per day and increased to 3 g/kg per day the following day. Infants in the intervention group had a lower percentage of weight loss and a lower incidence of EUGR. In VLBW infants, provision of a high early dose of parenteral lipid in the first week of age results in less weight loss and lower incidence of EUGR.

Effects of probiotics in preterm infants: A network meta-analysis
Chi C, Li C, Buys N, et al. *Pediatrics.*

This meta-analysis, which included 45 trials and 12,320 participants, found that Bifidobacterium plus Lactobacillus was associated with lower rates of mortality (risk ratio 0.56; 95% credible interval 0.34-0.84) and NEC morbidity (0.47; 0.27-0.79) in comparison to the placebo; Lactobacillus plus prebiotic was associated with lower rates of NEC morbidity (0.06; 0.01-0.41) in comparison to the placebo; Bifidobacterium plus prebiotic had the highest probability of having the lowest rate of mortality (surface under the cumulative ranking curve 83.94%); and Lactobacillus plus prebiotic had the highest probability of having the lowest rate of NEC (surface under the cumulative ranking curve 95.62%).

Sustained lung inflations during neonatal resuscitation at birth: A meta-analysis
Kapadia VS, Urlesberger B, Soraisham A, et al. *Pediatrics.*

This is a meta-analysis of sustained inflation (SI) of the lung at birth (1 or more SI >5 seconds) by International Liaison Committee on Resuscitation authors. Ten trials enrolling 1502 preterm newborns were reviewed. There were no differences between SI and control groups for death before discharge or key morbidities. However, for death within the first 2 days and death before discharge for preterm infants <28wk gestation, risk ratios were 2.42 (95% CI = 1.15-5.09) and 1.38 (95% confidence interval = 1.00-1.91) respectively, suggesting potential harm of SI compared to controls. The authors did not find benefit in using SI in preterm infants at birth. SI has potential for increased death before discharge and among infants born ≤28 weeks gestation.

Management of infants born to mothers with chorioamnionitis: A retrospective comparison of the three approaches recommended by the committee on fetus and newborn
Sloane AJ, Carola DL, Lafferty MA, et al. *J Neonatal Perinatal Med.*

This is a retrospective study of 1,521 infants born ≥35 weeks to mothers with chorioamnionitis comparing the three approaches recommended by the committee on fetus and newborn for management of those with early onset sepsis (EOS) risk factors; namely 1. laboratory testing and empiric antibiotics, 2. frequent clinical examinations and close vital sign monitoring (CCA), and 3. Kaiser Permanente EOS risk calculator (SRC). Results showed that hypothetical application of SRC and CCA resulted in 79.6% and 76.8-85.1% respectively fewer infants allocated empiric antibiotic therapy. SRC and CCA recommended empiric antibiotics only for three of the six infants (0.39%) with EOS. The authors conclude that SRC and CCA can reduce antibiotic use but potentially delay antibiotic treatment.

OTHER NOTEWORTHY PUBLICATIONS – November, 2020

COVID – 19
Pasteurization inactivates SARS-CoV-2–spiked breast milk
https://pubmed.ncbi.nlm.nih.gov/33087554
A case study of the first pregnant woman with COVID-19 in Bukavu, eastern Democratic Republic of the Congo (PDF)
https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-021-00127-5.pdf
Advancing health equity by translating lessons learned from NICU family visitations during the COVID-19 pandemic
https://pubmed.ncbi.nlm.nih.gov/33386310
Caring for critically ill children with suspected or proven coronavirus disease 2019 infection: recommendations by the scientific sections' collaborative of the European society of pediatric and neonatal intensive care (PDF)
https://journals.lww.com/pccmjournal/Fulltext/2021/01000/Caring_for_Critically_Ill_Children_With_Suspected.9.aspx
Vertical transmission of coronavirus disease 2019: a systematic review and meta-analysis (PDF)

https://www.ajog.org/action/showPdf?pii=S0002-9378%2820%2930823-1
Changes in preterm birth phenotypes and stillbirth at 2 Philadelphia hospitals during the SARS-CoV-2 pandemic, March-June 2020
https://jamanetwork.com/journals/jama/fullarticle/2774087
Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) antibodies at delivery in women, partners, and newborns
https://pubmed.ncbi.nlm.nih.gov/33116054
Neonates hospitalized with community-acquired SARS-CoV-2 in a Colorado neonatal intensive care unit (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7316651/pdf/neo-0001.pdf

Pediatrics
Identification of prenatal opioid exposure within health administrative databases
https://pubmed.ncbi.nlm.nih.gov/33376211
Site-level variation in the characteristics and care of infants with neonatal opioid withdrawal
https://pubmed.ncbi.nlm.nih.gov/33386337
Evaluating definitions for neonatal abstinence syndrome
https://pubmed.ncbi.nlm.nih.gov/33268396
Enteral vitamin A for reducing severity of bronchopulmonary dysplasia: A randomized trial
https://pubmed.ncbi.nlm.nih.gov/29246130
Prediction of in-hospital mortality after 24 hours in very low birth weight infants
https://pubmed.ncbi.nlm.nih.gov/33310907
Effects of probiotics in preterm infants: A network meta-analysis
https://pubmed.ncbi.nlm.nih.gov/33323491
Sustained lung inflations during neonatal resuscitation at birth: A meta-analysis
https://pubmed.ncbi.nlm.nih.gov/33361356
Disagreement about surgical intervention in Trisomy 18
https://pubmed.ncbi.nlm.nih.gov/33298466
Supplement 1: Part 5: Neonatal resuscitation 2020 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care
https://pubmed.ncbi.nlm.nih.gov/33087555

Journal of Pediatrics
Predictive accuracy of transcutaneous bilirubin assessments (PDF)
https://www.jpeds.com/action/showPdf?pii=S0022-3476%2820%2931387-1
Intravenous lipid for preterm infants: the right amount, at the right time, of the right kind
https://pubmed.ncbi.nlm.nih.gov/32889011
Cardiovascular implications for offspring born to mothers with preeclampsia
https://pubmed.ncbi.nlm.nih.gov/32795476
High early parenteral lipid in very preterm infants: a randomized-controlled trial
https://pubmed.ncbi.nlm.nih.gov/32798567
Synchronized inflations generate greater gravity-dependent lung ventilation in neonates
https://pubmed.ncbi.nlm.nih.gov/32827530
Clinical factors influencing time to decannulation in children with tracheostomy and ventilator dependence secondary to bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/32861694
Family integrated care for preterm infants in China: a cluster randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/32898578
Mother's own milk biomarkers predict coming to volume in pump-dependent mothers of preterm infants
https://pubmed.ncbi.nlm.nih.gov/32916143
Decision accuracy and safety of transcutaneous bilirubin screening at intermountain healthcare

https://pubmed.ncbi.nlm.nih.gov/32890579
Coronary dilatation and endothelial inflammation in neonates born to mothers with preeclampsia
https://pubmed.ncbi.nlm.nih.gov/32712283
A multi-interventional nutrition program for newborns with congenital heart disease
https://pubmed.ncbi.nlm.nih.gov/32827527
Up-regulation of nfat5 mrna and fzd4 mrna as a marker of poor outcome in neonatal hypoxic-ischemic encephalopathy
https://pubmed.ncbi.nlm.nih.gov/32828883
A randomized placebo-controlled pilot trial of early targeted nonsteroidal anti-inflammatory drugs in preterm infants with a patent ductus arteriosus
https://pubmed.ncbi.nlm.nih.gov/32858033
Prevention of perinatal HIV transmission in an area of high HIV prevalence in the United States
https://pubmed.ncbi.nlm.nih.gov/32971142
Maternal stress during pregnancy predicts infant infectious and noninfectious illness
https://pubmed.ncbi.nlm.nih.gov/32827529
Evaluation of gastroesophageal reflux disease 1 year after esophageal atresia repair: paradigms lost from a single snapshot?
https://pubmed.ncbi.nlm.nih.gov/32918920
Association between nephrotoxic drug combinations and acute kidney injury in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/32818481
Coronary involvement in cardiac neonatal lupus
https://pubmed.ncbi.nlm.nih.gov/32918919

Pediatric Research
January issue not released.

Archives of Disease in Childhood - Fetal & Neonatal Edition
Stressors and support system among parents of neonates hospitalised with systemic infections: qualitative study in South India (PDF)
https://adc.bmj.com/content/archdischild/106/1/20.full.pdf
Genetic landscape of congenital disorders in patients from Southeast Asia: results from sequencing using a gene panel for Mendelian phenotypes
https://www.ncbi.nlm.nih.gov/pubmed/32978145
Early-onset sepsis: can we screen fewer babies safely?
https://www.ncbi.nlm.nih.gov/pubmed/31678929
Letter: Early neonatal vitamin A supplementation and infant mortality: two alternative hypotheses
https://www.ncbi.nlm.nih.gov/pubmed/31949034

Journal of Perinatology
Surf early to higher tides: surfactant therapy to optimize tidal volume, lung recruitment, and iNO response (PDF)
https://www.nature.com/articles/s41372-020-0764-4.pdf
Ductal steal: does it affect pre-ductal arteries (PDF)
https://www.nature.com/articles/s41372-020-00844-3.pdf
Recent advances in pathophysiology and management of transient tachypnea of newborn
https://www.ncbi.nlm.nih.gov/pubmed/32753712
"Optimal surfactant delivery protocol using the bovine lipid extract surfactant: a quality improvement study" (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7532933/pdf/41372_2020_Article_846.pdf
Epidemiology of readmissions in early infancy following nonelective cesarean delivery
https://www.ncbi.nlm.nih.gov/pubmed/32669643

Early use of combined exogenous surfactant and inhaled nitric oxide reduces treatment failure in persistent pulmonary hypertension of the newborn: a randomized controlled trial
https://www.ncbi.nlm.nih.gov/pubmed/32792635
Characteristics and outcomes of preterm neonates according to number of doses of surfactant received (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7424238/pdf/41372_2020_Article_779.pdf
Effect of tidal volume and end tracheal tube leakage on end-tidal CO2 in very low birth weight infants (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7399592/pdf/41372_2020_Article_758.pdf
Inhaled bronchodilator exposure in the management of bronchopulmonary dysplasia in hospitalized infants (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7404081/pdf/41372_2020_Article_760.pdf
Early assessment of lung aeration using an ultrasound score as a biomarker of developing bronchopulmonary dysplasia: a prospective observational study (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7358564/pdf/41372_2020_Article_724.pdf
Burden of prematurity-associated recurrent wheezing: caregiver missed work in the D-Wheeze trial
https://www.ncbi.nlm.nih.gov/pubmed/32694857
Pulmonary function in extremely low birth weight infants with bronchopulmonary dysplasia before hospital discharge (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7548054/pdf/41372_2020_Article_856.pdf
Clinical validity of systemic arterial steal among extremely preterm infants with persistent patent ductus arteriosus
https://www.ncbi.nlm.nih.gov/pubmed/32393829
A randomized trial of intravenous acetaminophen versus indomethacin for treatment of hemodynamically significant PDAs in VLBW infants
https://www.ncbi.nlm.nih.gov/pubmed/32439957
Hemodynamic and clinical consequences of early versus delayed closure of patent ductus arteriosus in extremely low birth weight infants
https://www.ncbi.nlm.nih.gov/pubmed/32792636
Outcomes in infants < 29 weeks of gestation following single-dose prophylactic indomethacin (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7499931/pdf/41372_2020_Article_814.pdf
Association of chorioamnionitis and patent ductus arteriosus in a national U.S. cohort
https://www.ncbi.nlm.nih.gov/pubmed/33093626
Use of vasopressin in neonatal hypertrophic obstructive cardiomyopathy: case series
https://www.ncbi.nlm.nih.gov/pubmed/32951013
Effects of standardized feeding protocol on growth velocity and necrotizing enterocolitis in extremely low birth weight infants
https://www.ncbi.nlm.nih.gov/pubmed/33281186
Oral-feeding guidelines for preterm neonates in the NICU: a scoping review
https://www.ncbi.nlm.nih.gov/pubmed/33288867
Delay in achieving enteral autonomy and growth outcomes in very low birth weight infants with surgical necrotizing enterocolitis (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7710157/pdf/41372_2020_Article_880.pdf
Early-onset sepsis in term infants admitted to neonatal intensive care units (2011–2016) (PDF)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7568457/pdf/41372_2020_Article_860.pdf
A quality improvement project improving the value of iNO utilization in preterm and term infants
https://www.ncbi.nlm.nih.gov/pubmed/32770031
Critical decision-making in neonatology and pediatrics: the I–P–O framework
https://www.ncbi.nlm.nih.gov/pubmed/32999448
Ductal steal: does it affect pre-ductal arteries (PDF)
https://www.nature.com/articles/s41372-020-00851-4.pdf

Neonatology

Pressure versus sudden wean from nasal continuous positive airway pressure in preterm infants: a systematic review and meta-analysis (PDf)
https://www.karger.com/Article/Pdf/507863
Emerging role of the NLRP3 inflammasome and interleukin-1β in neonates (PDF)
https://www.karger.com/Article/Pdf/507584
A prospective cohort study of fecal miR-223 and miR-451a as noninvasive and specific biomarkers for diagnosis of necrotizing enterocolitis in preterm infants
https://www.ncbi.nlm.nih.gov/pubmed/33238267
Associations between red blood cell and platelet transfusions and retinopathy of prematurity (PDF)
https://www.karger.com/Article/Pdf/512020
Effect of a dual-strain probiotic on necrotizing enterocolitis in neonates with ductal-dependent congenital heart disease: a retrospective cohort study
https://www.ncbi.nlm.nih.gov/pubmed/32781449
The relationship between oxidative stress, intermittent hypoxemia, and hospital duration in moderate preterm infants
https://www.ncbi.nlm.nih.gov/pubmed/32799210
Congenital anomalies in very-low-birth-weight infants: a nationwide cohort study
https://www.ncbi.nlm.nih.gov/pubmed/32772029
Managing preterm infants born to COVID-19 mothers: evidence from a retrospective cohort study in Wuhan, China
https://www.ncbi.nlm.nih.gov/pubmed/32799197
Delay in treatment of neonatal seizures: a retrospective cohort study (PDF)
https://www.karger.com/Article/Pdf/509282
RK Lactoferrin expression is not associated with late-onset sepsis in very preterm infants
https://www.ncbi.nlm.nih.gov/pubmed/32862184
Noninvasive detection of hemolysis with ETCOc measurement in neonates at risk for significant hyperbilirubinemia
https://www.ncbi.nlm.nih.gov/pubmed/32894848
Amoxicillin dosing regimens for the treatment of neonatal sepsis: balancing efficacy and neurotoxicity (PDF)
https://www.karger.com/Article/Pdf/509751
Validation of a new transcutaneous tcPO2/tcPCO2 sensor with an optical oxygen measurement in preterm neonates (PDF)
https://www.karger.com/Article/Pdf/510659
Creatinine at birth correlates with gestational age and birth weight: another factor of the imbroglio in early neonatal life
https://www.ncbi.nlm.nih.gov/pubmed/32961538
Moral distress and considering leaving in NICU nurses: direct effects and indirect effects mediated by burnout and the hospital ethical climate
https://www.ncbi.nlm.nih.gov/pubmed/32750693
High-Dose Erythropoietin in Extremely Low Gestational Age Neonates Does Not Alter Risk of Retinopathy of Prematurity
https://www.ncbi.nlm.nih.gov/pubmed/33113526
A parechovirus type 3 infection with a presumed intrauterine onset: a poor neurodevelopmental outcome (PDF)
https://www.karger.com/Article/Pdf/509571

American Journal of Perinatology

Maternal outcomes of ongoing pregnancies complicated by fetal life-limiting conditions
https://pubmed.ncbi.nlm.nih.gov/32645723
Outcomes of isolated fetal ventriculomegaly that resolve in utero
https://pubmed.ncbi.nlm.nih.gov/32772358

Ultrasound to localize the peripherally inserted central catheter tip position in newborn infants
https://pubmed.ncbi.nlm.nih.gov/31412404
Short-term outcomes following standardized admission of late preterm infants to family-centered care
https://pubmed.ncbi.nlm.nih.gov/31430819
Youtube as a source of patient information for prenatal repair of myelomeningocele
https://pubmed.ncbi.nlm.nih.gov/31430813
Systemic to pulmonary collaterals in extremely low birth weight infants: incidence, clinical significance, and hemodynamic features
https://pubmed.ncbi.nlm.nih.gov/31430815
Macrosomic newborns delivered at term after labor among nondiabetic women: maternal and neonatal morbidities
https://pubmed.ncbi.nlm.nih.gov/31430814
Regional contribution of previable infant deaths to infant mortality rates in the United States
https://pubmed.ncbi.nlm.nih.gov/31480083
The association between positive antenatal depression screening and breastfeeding initiation and continuation
https://pubmed.ncbi.nlm.nih.gov/31480085
Prone versus supine position for lung ultrasound in neonates with respiratory distress
https://pubmed.ncbi.nlm.nih.gov/31480084
New strategies to tackle the combined biological and social context of preterm birth
https://pubmed.ncbi.nlm.nih.gov/31480082

Journal of Neonatal-Perinatal Medicine
Pilot study of cerebral and somatic autoregulation using NIRS in preterm neonates
https://pubmed.ncbi.nlm.nih.gov/33459669
Spontaneous intestinal perforation associated with premature twin infants
https://pubmed.ncbi.nlm.nih.gov/33459668
Peripherally inserted central catheter migration in neonates: Incidence, timing and risk factors
https://pubmed.ncbi.nlm.nih.gov/33459671
Infantile spinal muscular atrophy —the potential for cure of a fatal disease
https://pubmed.ncbi.nlm.nih.gov/33459670
Standardized delivery room management for neonates with a prenatal diagnosis of congenital heart disease: A model for improving interdisciplinary delivery room care
https://pubmed.ncbi.nlm.nih.gov/33361613
Accuracy of a spontaneous breathing trial for extubation of neonates
https://pubmed.ncbi.nlm.nih.gov/33337394
Neurodevelopmental outcome of healthy term newborn with serum bilirubin >15 mg/dl at one year
https://pubmed.ncbi.nlm.nih.gov/33337390
A case of neonatal diabetes insipidus following dexamethasone for bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/33337391
Breastfeeding initiation among women with preeclampsia with and without severe features
https://pubmed.ncbi.nlm.nih.gov/33337389
Bolus versus continuous feedings following treatment for medical necrotizing enterocolitis
https://pubmed.ncbi.nlm.nih.gov/33337396
Management of infants born to mothers with chorioamnionitis: A retrospective comparison of the three approaches recommended by the committee on fetus and newborn
https://pubmed.ncbi.nlm.nih.gov/33337392
Short-term outcome of very low-birth-weight infants in a tertiary care hospital in Saudi Arabia over a decade
https://pubmed.ncbi.nlm.nih.gov/33337393
Biomarkers as point of care tests (POCT) in neonatal sepsis: A state of science review
https://pubmed.ncbi.nlm.nih.gov/33337395
Postnatally acquired CMV meningitis diagnosed via BioFire FilmArray: A case report

https://pubmed.ncbi.nlm.nih.gov/33325402
Delayed cord clamping in infants born less than 35 weeks: A retrospective study
https://pubmed.ncbi.nlm.nih.gov/33325400
A case of neonate effectively treated with everolimus for giant hepatic hemangioma complicated with congenital duodenal atresia and Kasabach–Merritt syndrome
https://pubmed.ncbi.nlm.nih.gov/33325401
Role of lung ultrasound in the assessment of recruitment maneuvers in ventilated preterm neonates with respiratory distress syndrome and its correlation with tracheal IL-6 levels: A randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/33325403
Anal skin tag – an unusual presenting feature of food protein-induced allergic proctocolitis in a neonate
https://pubmed.ncbi.nlm.nih.gov/33216045
Behavioral and neuroanatomical outcomes following altered serotonin expression in a hypoxic-ischemic injury neonate rodent model
https://pubmed.ncbi.nlm.nih.gov/33164949
TLR2 and TLR4 expressions in late-onset neonatal sepsis: Is it a potential novel biomarker?
https://pubmed.ncbi.nlm.nih.gov/33164948
Obstetrician patterns of steroid administration for the prenatal management of congenital pulmonary airway malformations
https://pubmed.ncbi.nlm.nih.gov/33164951
Comparison of outcomes of infants with giant omphaloceles over two decades
https://pubmed.ncbi.nlm.nih.gov/33164950
Urinary tract infections in very low birthweight infants: A two-center analysis of microbiology, imaging and heart rate characteristics
https://pubmed.ncbi.nlm.nih.gov/33136069
Primary neuronal dysmaturation in preterm brain: Important and likely modifiable
https://pubmed.ncbi.nlm.nih.gov/33136070
Which long line do we use in very low birth weight neonates; umbilical venous catheter or peripherally inserted central catheter?
https://pubmed.ncbi.nlm.nih.gov/33104045
Serum cytokine profiling in neonates with hypoxic ischemic encephalopathy
https://pubmed.ncbi.nlm.nih.gov/33074195
Basal ganglia echogenicity in preterm infants: A case series
https://pubmed.ncbi.nlm.nih.gov/33074194
Predictability of transcutaneous bilirubinometry in late preterm and term infants at risk for pathological hyperbilirubinemia
https://pubmed.ncbi.nlm.nih.gov/33074197
Survival rate of very low birth weight infants over a quarter century (1994 –2019): A single-institution experience
https://pubmed.ncbi.nlm.nih.gov/33074199
Effect of head covering on phototherapy induced hypocalcemia in term neonates with hyperbilirubinemia: A randomised controlled study
https://pubmed.ncbi.nlm.nih.gov/33074196
Nonimmune hydrops fetalis management from the perspective of fetal cardiologists: A single tertiary center experience from Egypt
https://pubmed.ncbi.nlm.nih.gov/33074198
Interaction between pulmonary vasculature and the patent ductus arteriosus in very premature infants
https://pubmed.ncbi.nlm.nih.gov/33044200
Reducing admission hypothermia in newborns at a tertiary care NICU of northern India: A quality improvement study
https://pubmed.ncbi.nlm.nih.gov/33044201
Pre-discharge growth pattern of very low birth weight infants (VLBW): A 5 year single center experience
https://pubmed.ncbi.nlm.nih.gov/33044202

Management of severe right lung cystic pulmonary interstitial emphysema in an infant at 24 weeks gestation with bedside selective left main stem bronchial intubation: Case report and review of the literature
https://pubmed.ncbi.nlm.nih.gov/32986686
Renal cystic diseases during the perinatal and neonatal period
https://pubmed.ncbi.nlm.nih.gov/32986687
Risk factors for postoperative hyperglycemia in neonates
https://pubmed.ncbi.nlm.nih.gov/32925115
Accuracy of parent-reported ages and stages questionnaire in assessing the motor and language skills of preterm infants
https://pubmed.ncbi.nlm.nih.gov/32894254
Prophylaxis for ophthalmia neonatorum in Brazil: A snapshot using a multi-professional national survey
https://pubmed.ncbi.nlm.nih.gov/32894255
Case report of neonatal ductus venosus atresia
https://pubmed.ncbi.nlm.nih.gov/32925113
Seroprevalence and risk factors of Toxoplasma gondii infection in women with recurrent fetal loss from the province of Khyber Pakhtunkhwa, Pakistan
https://pubmed.ncbi.nlm.nih.gov/32925112
Effects of antioxidant MnTBAP on angiogenesis in newborn mice with hyperoxic lung injury
https://pubmed.ncbi.nlm.nih.gov/32804105
Management of transient central diabetes insipidus with intravenous desmopressin in a premature infant with gastroschisis and septo-optic dysplasia: A case report
https://pubmed.ncbi.nlm.nih.gov/32804104
Meta-analysis comparing temperature on arrival at the referral hospital of newborns with hypoxic ischemic encephalopathy cooled with a servo-controlled device versus no device during transport
https://pubmed.ncbi.nlm.nih.gov/32741783
Use of hyperbaric oxygen therapy of purpura fulminans in an extremely low birth weight preterm: A case report
https://pubmed.ncbi.nlm.nih.gov/32741781
Diagnostics and therapy of bilateral choanal atresia in association with CHARGE syndrome
https://pubmed.ncbi.nlm.nih.gov/32741782
Kangaroo mother care can improve the short-term outcomes of very preterm infants
https://pubmed.ncbi.nlm.nih.gov/32568123
The impact of targeted oxygen reduction test in preterm infants on reducing the oxygen exposure
https://pubmed.ncbi.nlm.nih.gov/32538878
Prevalence and clinical characteristics of perinatal chronic lung disease by infant gestational age
https://pubmed.ncbi.nlm.nih.gov/32474477
Combination percutaneous and medical management of cardiac rhabdomyomas obstructing tricuspid valve inflow: Case report
https://pubmed.ncbi.nlm.nih.gov/32333554
Inguinal hernia repair among Jordanian infants: A cohort study from a university based tertiary center
https://pubmed.ncbi.nlm.nih.gov/32333557
Bedside sonography performed by neonatology residents to confirm central vascular catheter position in neonates - A Prospective Diagnostic Evaluation study
https://pubmed.ncbi.nlm.nih.gov/32310193
The roles played by IL-10, IL-23 and IL-17A in term delivery
https://pubmed.ncbi.nlm.nih.gov/32310191
Neonatal outcomes following previable prelabour rupture of membranes before 23 weeks of gestation-a retrospective cohort study
https://pubmed.ncbi.nlm.nih.gov/32224534
Development of a prenatal clinical care pathway for uncomplicated gastroschisis and literature review
https://pubmed.ncbi.nlm.nih.gov/32145003

Safety of immediate skin-to-skin contact after vaginal birth in vigorous late preterm neonates – A pilot study
https://pubmed.ncbi.nlm.nih.gov/32083594
Maternal risk factors associated with inadequate testing and loss to follow-up in infants with perinatal hepatitis C virus exposure
https://pubmed.ncbi.nlm.nih.gov/32039866
Non-invasive fetal electrocardiography ameliorates fetal outcome in chorioangioma: A case report
https://pubmed.ncbi.nlm.nih.gov/32007964
Successful conservative managements of extensive pneumatoceles in a preterm girl: A case report
https://pubmed.ncbi.nlm.nih.gov/31903998

Maternal Health, Neonatology and Perinatology
Effects of timing of umbilical cord clamping on preventing early infancy anemia in low-risk Japanese term infants with planned breastfeeding: a randomized controlled trial (PDF)
https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-021-00125-7.pdf
Case report: necrotizing enterocolitis with a transverse colonic perforation in a 2-day old term neonate and literature review (PDF)
https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-020-00124-0.pdf
A scoping review of severe maternal morbidity: describing risk factors and methodological approaches to inform population-based surveillance (PDF)
https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-020-00123-1.pdf
Surgical site infection and its association with rupture of membrane following cesarean section in Africa: a systematic review and meta-analysis of published studies (PDF)
https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-020-00122-2.pdf
Perinatal mortality and its determinants in Sub Saharan African countries: systematic review and meta-analysis (PDF)
https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-020-00120-4.pdf

Neoreviews
Update on the use of intravenous immunoglobulin in pregnancy
https://pubmed.ncbi.nlm.nih.gov/33386311
Protection of the newborn through vaccination in pregnancy
https://pubmed.ncbi.nlm.nih.gov/33386312
Neonatal dermatology: The normal, the common, and the serious
https://pubmed.ncbi.nlm.nih.gov/33386313
Case 1: Case of lactic acidosis in a term neonate
https://pubmed.ncbi.nlm.nih.gov/33386314
Case 2: An inguinoscrotal swelling in a neonate at birth: It's time to expect the unexpected
https://pubmed.ncbi.nlm.nih.gov/33386315
Case 3: Case of a drooling infant
https://pubmed.ncbi.nlm.nih.gov/33386316
A tonic-clonic seizure at 27 weeks' gestation
https://pubmed.ncbi.nlm.nih.gov/33386317
Severe intrauterine growth restriction, thrombocytopenia, and direct hyperbilirubinemia in a 26-week premature infant
https://pubmed.ncbi.nlm.nih.gov/33386318
Fetal micrognathia and airway establishment on placental support
https://pubmed.ncbi.nlm.nih.gov/33386319

JAMA Pediatrics
Cannula with long and narrow tubing vs short binasal prongs for noninvasive ventilation in preterm infants: noninferiority randomized clinical trial
https://pubmed.ncbi.nlm.nih.gov/33165539

BMC Pediatrics

Introduction and feeding practices of solid food in preterm infants born in Salzburg!
https://pubmed.ncbi.nlm.nih.gov/33499832

Annual trend of neonatal mortality and its underlying causes: population-based study – São Paulo State, Brazil, 2004–2013
https://pubmed.ncbi.nlm.nih.gov/33499817

Portal vein thrombosis and food protein-induced allergic proctocolitis in a premature newborn with hypereosinophilia: a case report
https://pubmed.ncbi.nlm.nih.gov/33485314

Mothers' experiences of parenting and everyday life of children born at 23 weeks of gestation – a qualitative descriptive study
https://pubmed.ncbi.nlm.nih.gov/33485315

Analysis of cranial type characteristics in term infants: a multi-center study
https://pubmed.ncbi.nlm.nih.gov/33468075

Feeding patterns and BMI trajectories during infancy: a multi-ethnic, prospective birth cohort
https://pubmed.ncbi.nlm.nih.gov/33441111

Effectiveness of FIBEROPTIC phototherapy compared to conventional phototherapy in treating HYPERBILIRUBINEMIA amongst term neonates: a randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/33430819

Effectiveness of the close collaboration with parents intervention on parent-infant closeness in NICU
https://pubmed.ncbi.nlm.nih.gov/33430816

Effects of nutrition therapy on growth, inflammation and metabolism in immature infants: a study protocol of a double-blind randomized controlled trial (ImNuT)
https://pubmed.ncbi.nlm.nih.gov/33430816

MW RK *Modified lung ultrasound score predicts ventilation requirements in neonatal respiratory distress syndrome
https://pubmed.ncbi.nlm.nih.gov/33407270

Perinatal factors influencing the neonatal hearing screening results
https://pubmed.ncbi.nlm.nih.gov/33407257

The association of care transitions measure-15 score and outcomes after discharge from the NICU
https://pubmed.ncbi.nlm.nih.gov/33397291

Vancomycin-lock therapy for prevention of catheter-related bloodstream infection in very low body weight infants
https://pubmed.ncbi.nlm.nih.gov/33397325

Pediatric Critical Care Medicine

The relationship between preoperative feeding exposures and postoperative outcomes in infants with congenital heart disease
https://pubmed.ncbi.nlm.nih.gov/33009358

Prevalence and outcomes of congenital heart disease in very low birth weight preterm infants: an observational study from the Brazilian neonatal network database
https://pubmed.ncbi.nlm.nih.gov/33021513

Hemodynamic response to fluid boluses for hypotension in children in a cardiac ICU
https://pubmed.ncbi.nlm.nih.gov/33079893

New England Journal of Medicine

Visible intestinal peristalsis in a neonate
https://pubmed.ncbi.nlm.nih.gov/33393744

Lancet

No relevant content

JAMA
A piece of my mind: Shared grief
https://pubmed.ncbi.nlm.nih.gov/33496778
A piece of my mind: Root cause analysis
https://pubmed.ncbi.nlm.nih.gov/33464340
Neonatal abstinence syndrome and maternal opioid-related diagnoses in the US, 2010-2017
https://pubmed.ncbi.nlm.nih.gov/33433576

BMJ
No relevant content

Pediatric Infectious Disease Journal
Mupirocin and chlorhexidine genotypic resistance found in Staphylococcus aureus isolated from young infants below 90 days old: a genetic basis for eradication failure
Https://pubmed.ncbi.nlm.nih.gov/32925545
Late-onset hearing loss from congenital Cytomegalovirus infection after newborn period in a highly immune population in China
Https://pubmed.ncbi.nlm.nih.gov/33284252
Inherited chromosomally integrated Human Herpesvirus 6: an unexpected finding in a septic neonate
Https://pubmed.ncbi.nlm.nih.gov/33284253
Ocular outcome of Brazilian patients with congenital Toxoplasmosis
Https://pubmed.ncbi.nlm.nih.gov/33060522
Prevalence of capsular serotype, pilus island distribution, and antibiotic resistance in pediatric and adult invasive Group B Streptococcus isolates: data from a nationwide prospective surveillance study in Germany
Https://pubmed.ncbi.nlm.nih.gov/33201062

Pediatric Cardiology
No relevant content

Pediatric Neurology
No relevant content

Obstetrics and Gynecology
Risk of clinically significant chromosomal microarray analysis findings in fetuses with nuchal translucency from 3.0 mm through 3.4 mm
https://pubmed.ncbi.nlm.nih.gov/33278279

American Journal of Obstetrics & Gynecology
Amniotic fluid il-6 and il-8 are superior predictors of fetal lung injury compared to maternal or fetal plasma cytokines or placental histopathology in a nonhuman primate model
https://www.ncbi.nlm.nih.gov/pubmed/33412130

Hospital Pediatrics
Maternal smoking in pregnancy and child's hospital use up to 5 years of age in a data linkage birth cohort
https://pubmed.ncbi.nlm.nih.gov/33268337/

BASIC SCIENCE SELECTIONS
Evaluation of recombinant human SP-D in the rat premature lung model
Arroyo R, Grant SN, Gouwens KR, et al. *Ann Anat.*
https://www.ncbi.nlm.nih.gov/pubmed/33444741

Cellular clocks in hyperoxia effects on [Ca(2+)]i regulation in developing human airway smooth muscle
Bartman CM, Matveyenko A, Pabelick CM, et al. *Am J Physiol Lung Cell Mol Physiol.*
https://www.ncbi.nlm.nih.gov/pubmed/33404366

Restoration of surfactant activity by polymyxin B in lipopolysaccharide-potentiated injury of immature rabbit lungs
Calkovska A, Haegerstrand-Björkman M, Curstedt T, et al. *Sci Rep.*
https://www.ncbi.nlm.nih.gov/pubmed/33420141

Prematurity blunts the insulin- and amino acid-induced stimulation of translation initiation and protein synthesis in skeletal muscle of neonatal pigs
Rudar M, Naberhuis JK, Suryawan A, et al. *Am J Physiol Endocrinol Metab.*
https://www.ncbi.nlm.nih.gov/pubmed/33427053

Dissociable effects of dietary sodium in early life upon somatic growth, fluid homeostasis, and spatial memory in mice of both sexes
Segar JL, Grobe CC, Balapattabi K, et al. *Am J Physiol Regul Integr Comp Physiol.*
https://www.ncbi.nlm.nih.gov/pubmed/33439766

Parenteral fish-oil containing lipid emulsions limit initial lipopolysaccharide-induced host immune responses in preterm pigs
Yakah W, Ramiro-Cortijo D, Singh P, et al. *Nutrients.*
https://www.ncbi.nlm.nih.gov/pubmed/33445698

mGlu3 receptor regulates microglial cell reactivity in neonatal rats
Zinni M, Mairesse J, Pansiot J, et al. *J Neuroinflammation.*
https://www.ncbi.nlm.nih.gov/pubmed/33407565

Clinical
Incidence of brain lesions in moderate-late preterm infants assessed by cranial ultrasound and MRI: The BIMP-study
Boswinkel V, Krüse-Ruijter MF, Nijboer-Oosterveld J, et al. *Eur J Radio.*
https://www.ncbi.nlm.nih.gov/pubmed/33429207

Non-invasive continuous renal tissue oxygenation monitoring to identify preterm neonates at risk for acute kidney injury
Harer MW, Adegboro CO, Richard LJ, et al. *Pediatr Nephrol.*
https://www.ncbi.nlm.nih.gov/pubmed/33389091

Vancomycin-lock therapy for prevention of catheter-related bloodstream infection in very low body weight infants
Liang H, Zhang L, Guo X, et al. *BMC Pediatr.*
https://www.ncbi.nlm.nih.gov/pubmed/33397325

Automated brain morphometric biomarkers from MRI at term predict motor development in very preterm infants
Kline JE, Illapani VSP, He L, et al. *Neuroimage Clin.*
https://www.ncbi.nlm.nih.gov/pubmed/33395969

Protein levels and protease activity in milk from mothers of pre-term infants: A prospective longitudinal study of human milk macronutrient composition
Caldeo V, Downey E, O'Shea CA, et al. *Clin Nutr.*

https://www.ncbi.nlm.nih.gov/pubmed/33419616

The general movements assessment in neonates with hypoxic ischemic encephalopathy
Pouppirt NR, Martin V, Pagnotto-Hammitt L, et al. *J Child Neurol.*
https://www.ncbi.nlm.nih.gov/pubmed/33439066

Azithromycin for preventing bronchopulmonary dysplasia in preterm infants: A systematic review and meta-analysis
Razak A, Alshehri N, et al. *Pediatr Pulmonol.*
https://www.ncbi.nlm.nih.gov/pubmed/33382534

Inflammation-associated gene polymorphisms and clinical variables in the incidence and progression of retinopathy of prematurity
Szpecht D, Chmielarz-CzarnociŃska A, Gadzinowski J, et al. *Cent Eur J Immunol.*
https://www.ncbi.nlm.nih.gov/pubmed/33437180