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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – February 2021

Outcomes of endotracheal suctioning in non-vigorous neonates born through meconium-stained amniotic fluid: a systematic review and meta-analysis
Phattraprayoon N, Tangamornsuksan W and Ungtrakul T. *Arch Dis Child Fetal Neonatal Ed.*

This systematic review and meta-analysis included 581 non-vigorous meconium-stained infants (in 4 studies), 292 of whom did not receive endotracheal suctioning and 289 of whom received endotracheal suctioning after birth. The authors found no significant difference between groups for the primary outcome of meconium aspiration syndrome (RR 0.98; 95% CI 0.71 to 1.35).

Effect of cumulative dexamethasone dose in preterm infants on neurodevelopmental and growth outcomes: A Western Australia experience
Buchiboyina AK, Yip CSA, Kohan R, et al. *Arch Dis Child Fetal Neonatal Ed.*

This retrospective cohort study included infants <29 weeks' gestation who were mechanically ventilated >7 days. Infants were divided into three groups: total cumulative dexamethasone <2 mg/kg (n=66), total cumulative dexamethasone ≥2 mg/kg (n=38), and controls (n=324). The authors found no difference in odds of long term disability or cerebral palsy between the control, <2 mg/kg, or ≥2 mg/kg groups but did observe lower growth measurements in the dexamethasone groups as compared to the controls.

Proactive neonatal treatment at 22 weeks of gestation: a systematic review and meta-analysis
Backes CH, Rivera BK, Pavlek L, et al. *Am J Obstet Gynecol.*

This is a systematic review and meta-analysis of studies reporting on the mortality estimates of babies born at 22 weeks' gestation and offered resuscitation. The authors identified 31 observational studies of 2226 patients. Individual study populations range from 1 to 385. Survival improved from 2000 to 2020. Overall survival was 29% and was improved in cases with antenatal steroids. Survival without major morbidity was 11%. BPD was found in 78% of patients, severe BPD in 61%. Severe IVH/PVL was present in 25% of patients, severe NEC in 12%, and severe ROP in 39%. Only five studies reported Bayley assessments after hospital discharge, in those, survival without moderate or severe impairment was 37%. The authors call for standardization of data collection and reporting in this extremely preterm population to better understand outcomes at the threshold of viability.

Routine early antibiotic use in symptomatic preterm neonates: a pilot randomized controlled trial
Ruoss JL, Bazacliu C, Russell JT, et al. *J Pediatr.*

This was an unblinded pragmatic pilot randomized trial in low-risk preterm infants <33 weeks gestation with symptoms of prematurity to antibiotics or no antibiotics after birth. Infants eligible for randomization (group C) had symptoms associated with prematurity that have historically been considered indications for treatment with antibiotics. These infants were randomized to either group C/antibiotics (antibiotics prescribed at birth) or group C/no antibiotics (no antibiotics prescribed at birth). Primary outcome was a composite outcome of late-onset sepsis, BPD, NEC and death. A non-significant increase in the composite outcome was seen in group C/no antibiotics vs group C/antibiotics when analyzed as on an intent-to-treat basis. Since treatment switching was common in group C/no antibiotics, a secondary analysis of group C by actual use of antibiotics demonstrated trend towards more composite adverse events and BPD in the infants that received antibiotics. Adverse events did not differ significantly between the randomization arms. The authors proposed this trial as a framework for a larger multi-centered trial.

Association between cerebral oxygen saturation and brain injury in neonates receiving therapeutic hypothermia for neonatal encephalopathy
Szakmar E, Smith J, Yang E, et al. *J Perinatol.*

The objective of this retrospective cohort study of 49 infants, who received therapeutic hypothermia (TH) for mild to severe neonatal encephalopathy, was to assess the association of cerebral oxygen saturation (CrSO2) by near infrared spectroscopy (NIRS) during TH and rewarming with evidence of brain injury on post-rewarming MRI. Increasing CrSO2 values from the first to the second day of TH as well as increasing mean CrSO2 values during rewarming were associated with brain injury. The authors concluded that clinically applied NIRS during TH and rewarming could assist in identifying the risk for brain injury.

Antenatal betamethasone redistributes central blood flows and preferentially augments right ventricular output and pump function in preterm fetal lambs
Smolich JJ, Mynard JP, et al. *Am J Physiol Regul Integr Comp Physiol.*

The aim of this study was to test the hypothesis that BMZ given to pregnant ewes is associated with complementary shifts in left (LV) and right ventricular (RV) cardiac performance. BMZ treatment increased RV output and RV total power, redistributed LV output from the fetal upper body to the lower body and placenta, induced a greater proportion of RV output passing to the lungs. These findings show that antenatal BMZ produces a widespread redistribution of central arterial and venous flows in the fetus, accompanied by a preferential rise in RV pumping performance.

Real-time continuous glucose monitoring in preterm infants (REACT): an international, open-label, randomised controlled trial
Beardsall K, Thomson L, Guy C, et al. Lancet Child Adolesc Health.

Since continuous glucose monitoring (CGM) is widely used in adults and children the REACT trial aimed to evaluate the efficacy and safety of CGM in preterm infants. Compared with infants in the standard care group, infants managed using CGM had more time in the target range and fewer episodes of glucose concentration < 47 mg/dl. The authors conclude that real-time CGM can reduce exposure to prolonged or severe hyperglycemia and hypoglycemia.

Antenatal N-acetylcysteine to improve outcomes of premature infants with intra-amniotic infection and inflammation (Triple I): randomized clinical trial
Buhimschi CS, Bahtiyar MO, Zhao G, et al. *Pediatr Res.*

This is a single-center, quadruple-blind, placebo-controlled trial of pregnant women (n=67) with impending PTB due to confirmed Triple I using maternal intravenous N-acetylcysteine (NAC). Newborns exposed to NAC (n = 33) had significantly improved status at birth and required less intensive resuscitation compared to placebo (n = 34) with lower composite neonatal morbidity independent of gestational age, birth weight, sex, or race. Fewer NAC-exposed newborns developed two or more prematurity-related severe morbidities with the strongest protection afforded against bronchopulmonary dysplasia (NAC: 3% vs. placebo: 32%, relative risk, 0.10; 95% CI: 0.01-0.73). The authors conclude that this study provides support for larger studies of intrapartum NAC to reduce prematurity-related morbidity.

Oral feeding for infants and children receiving nasal continuous positive airway pressure and high flow nasal cannula: a systematic review
Canning A, Clarke S, Thorning S, et al. *BMC Pediatr.*

This systematic review was conducted to determine the success and safety of oral feeding in infants and children receiving nasal continuous positive airway pressure (nCPAP) or high flow nasal cannula (HFNC), compared to no oral feeding on CPAP or HFNC. The review included a total of 16 studies until June 2020 on children (preterm to <18yrs) on nCPAP or HFNC who were fed orally. Methods of non-invasive ventilation included nCPAP (n=6), nCPAP and HFNC (n=5) and HFNC (n=5). Eleven studies reported on adverse events. Oral feeding safety was predominantly based on retrospective clinical data, with only one study using an instrumental swallow evaluation (VFSS) to determine aspiration status. The findings were insufficient to conclude whether commencing oral feeding whilst on nCPAP or HFNC facilitates transition to full oral feeding without adverse effects, with need for further research.

Predictive models of neurodevelopmental outcomes after neonatal hypoxic-ischemic encephalopathy
Peeples ES, Rao R, Dizon MLV, et al. *Pediatrics.*

The authors sought to develop predictive models for death or neurodevelopmental impairment (NDI) after neonatal hypoxic-ischemic encephalopathy (HIE) at two time points: (1) NICU admission using "early" clinical variables (i.e., details of delivery, resuscitation, and initial transport) and (2) hospital discharge using "cumulative" data from throughout the entire hospitalization. Of the 486 infants studied, 180 died while 62 surviving infants had NDI. HIE severity, epinephrine administration in the delivery room, and respiratory support and fraction of inspired oxygen of 0.21 at admission were significant in the early model. Discovery models revealed areas under the curve of 0.852 for the early model and of 0.861 for the cumulative model, and both models performed well in the validation cohort (goodness-of-fit $\chi 2$: P = .24 and .06, respectively).

OTHER NOTEWORTHY PUBLICATIONS – November, 2020

COVID – 19
Clarifying the sweeping consequences of covid-19 in pregnant women, newborns, and children with existing cohorts
https://pubmed.ncbi.nlm.nih.gov/32797150
Outcomes of neonates born to mothers with severe acute respiratory syndrome coronavirus 2 infection at a large medical center in New York City
https://pubmed.ncbi.nlm.nih.gov/33044493
Danish premature birth rates during the COVID-19 lockdown
https://pubmed.ncbi.nlm.nih.gov/32788391
Electrostatic filters to reduce COVID-19 spread in bubble CPAP: an in vitro study of safety and efficacy

https://pubmed.ncbi.nlm.nih.gov/33249414
Pediatric faculty and trainee attitudes toward the COVID-19 pandemic
https://pubmed.ncbi.nlm.nih.gov/33431427
Neonates born to mothers with COVID-19: data from the Spanish society of neonatology registry.
https://pubmed.ncbi.nlm.nih.gov/33479162
The public health and clinical importance of accurate neonatal testing for COVID-19
https://pubmed.ncbi.nlm.nih.gov/33479163
Breastfeed or be vaccinated—an unreasonable default recommendation (PDF)
https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(21)00197-5.pdf
Preterm birth during the coronavirus disease 2019 (covid-19) pandemic in a large hospital system in the United States
https://pubmed.ncbi.nlm.nih.gov/33595244
Prematurity rates during the coronavirus disease 2019 (COVID-19) pandemic lockdown in Melbourne, Australia
https://pubmed.ncbi.nlm.nih.gov/33543904
Coronavirus disease 2019 (COVID-19) vaccines and pregnancy: what obstetricians need to know
https://pubmed.ncbi.nlm.nih.gov/33370015
Editorial: Have coronavirus disease 2019 (COVID-19) community lockdowns reduced preterm birth rates?
https://pubmed.ncbi.nlm.nih.gov/33543906

Pediatrics
Discharge age and weight for very preterm infants: 2005–2018
https://pubmed.ncbi.nlm.nih.gov/33510034
Vestibular, gaze, and balance disorders in asymptomatic congenital cytomegalovirus infection
https://pubmed.ncbi.nlm.nih.gov/33419867
Predictive models of neurodevelopmental outcomes after neonatal hypoxic-ischemic encephalopathy
https://pubmed.ncbi.nlm.nih.gov/33452064
Variability in cerebral palsy diagnosis
https://pubmed.ncbi.nlm.nih.gov/33402528
Increasing length of stay in the NICU for premature newborns: good or bad?
https://pubmed.ncbi.nlm.nih.gov/33510033
Vestibular disorders in congenital cytomegalovirus: a balancing act
https://pubmed.ncbi.nlm.nih.gov/33419866
Islamic beliefs about milk kinship and donor human milk in the United States
https://pubmed.ncbi.nlm.nih.gov/33483451
Why the maternal medication list matters: neonatal toxicity from combined serotonergic exposures
https://pubmed.ncbi.nlm.nih.gov/33504611
Necrotizing enterocolitis in neonates with hyperinsulinemic hypoglycemia treated with diazoxide
https://pubmed.ncbi.nlm.nih.gov/33483452

Journal of Pediatrics
Prolonged ductal patency in preterm infants: does it matter?
https://pubmed.ncbi.nlm.nih.gov/33130156
Infant growth after maternal dietary supplementation before and during pregnancy
https://pubmed.ncbi.nlm.nih.gov/33159913
A pilot randomized controlled trial of early targeted patent ductus arteriosus treatment using a risk based severity score (The PDA RCT)
https://pubmed.ncbi.nlm.nih.gov/33069668
Survival and developmental outcomes of neonates treated with extracorporeal membrane oxygenation: a 10-year single-center experience
https://pubmed.ncbi.nlm.nih.gov/33058857

Outcomes after introduction of minimally invasive surfactant therapy in two australian tertiary neonatal units
https://pubmed.ncbi.nlm.nih.gov/33068569
Epidemiology of surgical procedures, anesthesia, and imaging studies by gestational age during the first year of life in medicaid-insured infants
https://pubmed.ncbi.nlm.nih.gov/33098841
Development and validation of a model to predict neonatal abstinence syndrome
https://pubmed.ncbi.nlm.nih.gov/33080277
Costs of neonatal intensive care for Canadian infants with preterm birth
https://pubmed.ncbi.nlm.nih.gov/32979384
Congenital heart defects and the risk of spontaneous preterm birth
https://pubmed.ncbi.nlm.nih.gov/32980375
Improvement in the prediction of neonatal hypoxic-ischemic encephalopathy with the integration of umbilical cord metabolites and current clinical makers
https://pubmed.ncbi.nlm.nih.gov/33039387
Outcomes of infants with very low birth weight associated with birthplace difference: a retrospective cohort study of births in Japan and California
https://pubmed.ncbi.nlm.nih.gov/33058856
Longitudinal B-type natriuretic peptide levels predict outcome in infants with congenital diaphragmatic hernia
https://pubmed.ncbi.nlm.nih.gov/32997999
Growth from birth through six months for infants of mothers in the “women first” preconception maternal nutrition trial
https://pubmed.ncbi.nlm.nih.gov/32956698
Family experiences deciding for and against pediatric home ventilation
https://pubmed.ncbi.nlm.nih.gov/33068566
An evidence-based ethical approach to parental refusal of screening tests: the case of asymptomatic neonatal hypoglycemia
https://pubmed.ncbi.nlm.nih.gov/32950534
Prolonged tracheal intubation and the association between patent ductus arteriosus and bronchopulmonary dysplasia: a secondary analysis of the PDA-TOLERATE trial
https://pubmed.ncbi.nlm.nih.gov/32979387
Routine early antibiotic use in symptomatic preterm neonates: a pilot randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/32979383

Pediatric Research
Short-term efficacy of umbilical cord milking in preterm infants: systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/32316030
A systematic review on the association of month and season of birth with future anthropometric measures
https://pubmed.ncbi.nlm.nih.gov/32353858
Oropharyngeal colostrum therapy reduces the incidence of ventilator-associated pneumonia in very low birth weight infants: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/32225172
Perspectives from the Society for Pediatric Research. Neonatal encephalopathy clinical trials: developing the future
https://pubmed.ncbi.nlm.nih.gov/32221474
Preliminary evaluation of pre-speech and neurodevelopmental measures in 7-11-week-old infants with isolated oral clefts
https://pubmed.ncbi.nlm.nih.gov/32279071
The human milk oligosaccharides 2’-fucosyllactose and 6’-sialyllactose protect against the development of necrotizing enterocolitis by inhibiting toll-like receptor 4 signaling

https://pubmed.ncbi.nlm.nih.gov/32221473
The YAP signaling pathway promotes the progression of lymphatic malformations through the activation of lymphatic endothelial cells
https://pubmed.ncbi.nlm.nih.gov/32279070
Gut transit time, using radiological contrast imaging, to predict early signs of necrotizing enterocolitis
https://pubmed.ncbi.nlm.nih.gov/32244249
CD44 and RHAMM expression patterns in the human developing lung
https://pubmed.ncbi.nlm.nih.gov/32311697
Postnatal overfeeding induces hepatic microRNA-221 expression and impairs the PI3K/AKT pathway in adult male rats
https://pubmed.ncbi.nlm.nih.gov/32305038
Short-term outcomes of remote ischemic postconditioning 1 h after perinatal hypoxia–ischemia in term piglets
https://pubmed.ncbi.nlm.nih.gov/32294662
Incomplete resection of necrotic bowel may increase mortality in infants with necrotizing enterocolitis
https://pubmed.ncbi.nlm.nih.gov/32438367
Effect on splanchnic oxygenation of breast milk, fortified breast milk, and formula milk in preterm infants
https://pubmed.ncbi.nlm.nih.gov/32380507
Antenatal N-acetylcysteine to improve outcomes of premature infants with intra-amniotic infection and inflammation (Triple I): randomized clinical trial
https://pubmed.ncbi.nlm.nih.gov/32818949
Reaction times, learning, and executive functioning in adults born preterm
https://pubmed.ncbi.nlm.nih.gov/32193516
Later cooling within 6 h and temperatures outside 33-34 °C are not associated with dysfunctional autoregulation during hypothermia for neonatal encephalopathy
https://pubmed.ncbi.nlm.nih.gov/32268341
A hospital-based cohort study of gender and gestational age-specific body fat percentage at birth
https://pubmed.ncbi.nlm.nih.gov/32289811
Systematic Review: Utility of volatile organic compounds as a diagnostic tool in preterm infants
https://pubmed.ncbi.nlm.nih.gov/32120380
Review: Evidence for maternal diet-mediated effects on the offspring microbiome and immunity: implications for public health initiatives
https://pubmed.ncbi.nlm.nih.gov/32919391
Review: Do preterm girls need different nutrition to preterm boys? Sex-specific nutrition for the preterm infant
https://pubmed.ncbi.nlm.nih.gov/33184497
Review: Antenatal corticosteroids: a reappraisal of the drug formulation and dose
https://pubmed.ncbi.nlm.nih.gov/33177675
Review: Placental programming, perinatal inflammation, and neurodevelopment impairment among those born extremely preterm
https://pubmed.ncbi.nlm.nih.gov/33184498
Review: Gaining a deeper understanding of social determinants of preterm birth by integrating multi-omics data
https://pubmed.ncbi.nlm.nih.gov/33188285
Review: Racial and socioeconomic disparities in breast milk feedings in US neonatal intensive care units
https://pubmed.ncbi.nlm.nih.gov/33188286
Review: Placental origins of neonatal diseases: toward a precision medicine approach
https://pubmed.ncbi.nlm.nih.gov/33288874
Can biomarkers in umbilical cord blood predict atopic disease at school age?
https://pubmed.ncbi.nlm.nih.gov/31810077

Archives of Disease in Childhood - Fetal & Neonatal Edition

School-age outcomes following intraventricular haemorrhage in infants born extremely preterm
https://pubmed.ncbi.nlm.nih.gov/32732377

Diffuse excessive high signal intensity on term equivalent MRI does not predict disability: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/32451357

Neonatal outcomes of extremely preterm twins by sex pairing: an international cohort study
https://pubmed.ncbi.nlm.nih.gov/32451356

T-piece resuscitators: can they provide safe ventilation in a low compliant newborn lung?
https://pubmed.ncbi.nlm.nih.gov/32546543

Outcomes of endotracheal suctioning in non-vigorous neonates born through meconium-stained amniotic fluid: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/32561566

Reference values for the external genitalia of full-term and pre-term female neonates
https://pubmed.ncbi.nlm.nih.gov/32561564

Fate of pulmonary hypertension associated with bronchopulmonary dysplasia beyond 36 weeks postmenstrual age
https://pubmed.ncbi.nlm.nih.gov/32571832

Outcomes of haemoglobin Bart's hydrops fetalis following intrauterine transfusion in Ontario, Canada
https://pubmed.ncbi.nlm.nih.gov/32616558

Effect of opaque wraps for pulse oximeter sensors: randomised cross-over trial
https://pubmed.ncbi.nlm.nih.gov/32611602

Placental transfusion and short-term outcomes among extremely preterm infants
https://pubmed.ncbi.nlm.nih.gov/32732380

Effect of cumulative dexamethasone dose in preterm infants on neurodevelopmental and growth outcomes: a Western Australia experience
https://pubmed.ncbi.nlm.nih.gov/32690582

Skin-to-skin care alters regional ventilation in stable neonates
https://pubmed.ncbi.nlm.nih.gov/32732379

Mask versus nasal prong leak and intermittent hypoxia during continuous positive airway pressure in very preterm infants
https://pubmed.ncbi.nlm.nih.gov/3279605

Parental experiences of being approached to join multiple neonatal clinical trials: qualitative study (PARENT)
https://pubmed.ncbi.nlm.nih.gov/32737064

Fetal haemoglobin and bronchopulmonary dysplasia in neonates: an observational study
https://pubmed.ncbi.nlm.nih.gov/32847833

Implementation of bowel ultrasound practice for the diagnosis and management of necrotising enterocolitis
https://pubmed.ncbi.nlm.nih.gov/32398270

Treatment of infants with craniofacial malformations
https://pubmed.ncbi.nlm.nih.gov/32409560

Journal of Perinatology

Editorial: Critical disparities in perinatal health—understanding risks and changing the outcomes
https://pubmed.ncbi.nlm.nih.gov/33462341

Review: Improving the quality of neonatal acute kidney injury care: neonatal-specific response to the 22nd Acute Disease Quality Initiative (ADQI) conference
https://pubmed.ncbi.nlm.nih.gov/32892210

Racial/ethnic differences in maternal resilience and associations with low birthweight
https://pubmed.ncbi.nlm.nih.gov/33028937

Temporal trends in preterm birth phenotypes by plurality: Black–White disparity over half a century
https://pubmed.ncbi.nlm.nih.gov/33452419

High Black infant mortality in Wisconsin: factors associated with the ongoing racial inequity
https://pubmed.ncbi.nlm.nih.gov/33339984
Racial and ethnic disparities in outcomes through 1 year of life in infants born prematurely: a population based study in California
https://pubmed.ncbi.nlm.nih.gov/33514879
Premature infant skin barrier maturation: status at full-term corrected age
https://pubmed.ncbi.nlm.nih.gov/32493903
Quality Improvement: Individualized fluid management in extremely preterm neonates to ensure adequate diuresis without increasing complications
https://pubmed.ncbi.nlm.nih.gov/32814823
Blood myo-inositol concentrations in preterm and term infants
https://pubmed.ncbi.nlm.nih.gov/32934363
Delivery-based criteria for empiric antibiotic administration among preterm infants
https://pubmed.ncbi.nlm.nih.gov/32792629
The effect of umbilical cord milking on cerebral blood flow in very preterm infants: a randomized controlled study
https://pubmed.ncbi.nlm.nih.gov/32782323
Association between cerebral oxygen saturation and brain injury in neonates receiving therapeutic hypothermia for neonatal encephalopathy
https://pubmed.ncbi.nlm.nih.gov/33462339
Elevated supine midline head position for prevention of intraventricular hemorrhage in VLBW and ELBW infants: a retrospective multicenter study
https://pubmed.ncbi.nlm.nih.gov/32901115
Genetic predictors of severe intraventricular hemorrhage in extremely low-birthweight infants
https://pubmed.ncbi.nlm.nih.gov/32978526
Cost of clinician-driven tests and treatments in very low birth weight and/or very preterm infants
https://pubmed.ncbi.nlm.nih.gov/33268831
Do extremely preterm infants need retinopathy of prematurity screening earlier than 31 weeks postmenstrual age?
https://pubmed.ncbi.nlm.nih.gov/32377010
Timing of newborn hearing screening in the neonatal intensive care unit: implications for targeted screening for congenital cytomegalovirus infection
https://pubmed.ncbi.nlm.nih.gov/32893264
Comprehensive evaluation of risk factors for neonatal hearing loss in a large Brazilian cohort
https://pubmed.ncbi.nlm.nih.gov/32884104
The association between carbon dioxide, cerebral blood flow, and autoregulation in the premature infant
https://pubmed.ncbi.nlm.nih.gov/33033388
Embrace versus Cloth Wrap in preventing neonatal hypothermia during transport: a randomized trial
https://pubmed.ncbi.nlm.nih.gov/32686755
Quality Improvement: Improving thermoregulation in transported preterm infants: a quality improvement initiative
https://pubmed.ncbi.nlm.nih.gov/32678317
Journal Club: Prediction of severe retinopathy of prematurity in 24–30 weeks gestation infants using birth characteristics
https://pubmed.ncbi.nlm.nih.gov/33235283

Neonatology

Review: Ureaplasma-driven neuroinflammation in neonates: assembling the puzzle pieces
https://pubmed.ncbi.nlm.nih.gov/33271546
Antibiotic stewardship in premature infants: a systematic review
https://pubmed.ncbi.nlm.nih.gov/33271554

The choice of population and outcomes in neonatal trials on hyperbilirubinemia: are they relevant? An analysis of Cochrane Neonatal Reviews
https://pubmed.ncbi.nlm.nih.gov/33264799
Surrogate outcomes: an inevitable limitation of Hyperbilirubinemia-driven randomized controlled trials
https://pubmed.ncbi.nlm.nih.gov/33260178
Associated anomalies in congenital lung abnormalities: a 20-year experience
https://pubmed.ncbi.nlm.nih.gov/32841951
Alveolar airspace size in healthy and diseased infant lungs measured via hyperpolarized 3He gas diffusion magnetic resonance imaging
https://pubmed.ncbi.nlm.nih.gov/33176330
Intravenous edaravone plus therapeutic hypothermia offers limited neuroprotection in the hypoxic-ischaemic newborn piglet
https://pubmed.ncbi.nlm.nih.gov/33113527
Effect of phenobarbitone on amplitude-integrated electroencephalography in neonates with hypoxic-ischemic encephalopathy during hypothermia
https://pubmed.ncbi.nlm.nih.gov/33412550
Maternal citicoline-supplemented diet improves the response of the immature hippocampus to perinatal asphyxia in rats
https://pubmed.ncbi.nlm.nih.gov/33326978
Relationship between Apgar scores and morbidity and mortality outcomes in preterm infants: s single-centre cohort study
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Assessment of risk indicators for targeted cytomegalovirus screening in neonates
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Electrocardiographic screening in the first days of life for diagnosing long QT syndrome: findings from a birth cohort study in Germany
https://pubmed.ncbi.nlm.nih.gov/33181513
Use of cadaveric skin graft for staged gastroschisis repair in a premature infant
https://pubmed.ncbi.nlm.nih.gov/32927452
Hypothyroidism after percutaneous patent ductus arteriosus device closure in an extremely preterm infant: possible role of iodinated IV contrast
https://pubmed.ncbi.nlm.nih.gov/33378753
Pharmacoepidemiology of furosemide in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/33027793

American Journal of Perinatology
Prenatal tobacco exposure and childhood neurodevelopment among infants born prematurely
https://pubmed.ncbi.nlm.nih.gov/32862421
High flow nasal cannula versus nasal continuous positive airway pressure for primary respiratory support in preterm infants: a prospective randomized study
https://pubmed.ncbi.nlm.nih.gov/31563133
Evaluation of the effects of delayed cord clamping in infants of diabetic mothers
https://pubmed.ncbi.nlm.nih.gov/31563135
Evaluation of total antioxidant capacity and total oxidant status of preterm and term breast milk during the course of lactation and within a nursing session
https://pubmed.ncbi.nlm.nih.gov/31491799
Shoulder dystocia during delivery and long-term neurological morbidity of the offspring
https://pubmed.ncbi.nlm.nih.gov/31491802
Lactoferrin supplementation to prevent late-onset sepsis in preterm infants: a meta-analysis
https://pubmed.ncbi.nlm.nih.gov/31529448

Journal of Neonatal-Perinatal Medicine
No new content

Maternal Health, Neonatology and Perinatology

Antibiotic exposure and growth patterns in preterm, very low birth weight infants (PDF)
https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-021-00126-6.pdf
Prevalence of rhesus D-negative blood type and the challenges of rhesus D immunoprophylaxis among obstetric population in Ethiopia: a systematic review and meta-analysis (PDF)
https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-021-00129-3.pdf
Determinants of stillbirths among women who gave birth at Hawassa university comprehensive specialized hospital, Hawassa, Sidama, Ethiopia 2019: a case-control study (PDF)
https://mhnpjournal.biomedcentral.com/track/pdf/10.1186/s40748-021-00128-4.pdf

Neoreviews

Obesity and pregnancy
https://pubmed.ncbi.nlm.nih.gov/33526637
Fetal heart rate tracing category ii: a broad category in need of stratification
https://pubmed.ncbi.nlm.nih.gov/33526638
Maternal hematologic conditions and fetal/neonatal outcomes of pregnancy
https://pubmed.ncbi.nlm.nih.gov/33526639
Gastroesophageal reflux disease in neonates: facts and figures
https://pubmed.ncbi.nlm.nih.gov/33526640
Case 1: a term neonate with conjunctival hemorrhage, ecchymoses, and umbilical hematoma
https://pubmed.ncbi.nlm.nih.gov/33526641
Case 2: abdominal distention with paralytic ileus in a neonate
https://pubmed.ncbi.nlm.nih.gov/33526642
Case 3: cystic encephalomalacia and hyperpigmented plaques in a preterm infant
https://pubmed.ncbi.nlm.nih.gov/33526643
Diabetic ketoacidosis in the preterm gestation
https://pubmed.ncbi.nlm.nih.gov/33526644
Sudden onset of a unilateral erythematous preauricular mass in a preterm infant
https://pubmed.ncbi.nlm.nih.gov/33526645
Fetal sacrococcygeal teratoma and the development of hydrops
https://pubmed.ncbi.nlm.nih.gov/33526646

JAMA Pediatrics

Ampicillin and gentamicin in infants with suspected sepsis long live amp and gent—but for how long?
https://pubmed.ncbi.nlm.nih.gov/33165544
Antibiotic susceptibility of Escherichia Coli among infants admitted to neonatal intensive care units across the US from 2009 to 2017
https://pubmed.ncbi.nlm.nih.gov/33165599
Early formula supplementation trends by race/ethnicity among us children born from 2009 to 2015
https://pubmed.ncbi.nlm.nih.gov/32870259

BMC Pediatrics

Study protocol: baby-OSCAR trial: Outcome after Selective early treatment for Closure of patent ductus ARteriosus in preterm babies, a multicentre, masked, randomised placebo-controlled parallel group trial
https://pubmed.ncbi.nlm.nih.gov/33637074
Bedside upper gastrointestinal series in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/33607968
Quality improvement strategies to improve inpatient management of small and sick newborns across All Babies Count supported hospitals in rural Rwanda
https://pubmed.ncbi.nlm.nih.gov/33607961
Role of umbilical cord C-peptide levels in early prediction of hypoglycemia in infants of diabetic mothers
https://pubmed.ncbi.nlm.nih.gov/33596873

Attainment of smiling and walking in infancy associates with developmental delays at school entry in moderately-late preterm children: a community-based cohort study
https://pubmed.ncbi.nlm.nih.gov/33596865
Oral feeding for infants and children receiving nasal continuous positive airway pressure and high flow nasal cannula: a systematic review
https://pubmed.ncbi.nlm.nih.gov/33596866
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No relevant content

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Intrauterine gardnerella vaginalis infection results in fetal growth restriction and alveolar septal hypertrophy in a rabbit model
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