

Publications Working Group

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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – March 2022

[Review: Red cell transfusion thresholds for preterm infants: finally, some answers](#)

Edward F Bell. *Arch Dis Child Fetal Neonatal Ed.*

This article reviews the hemoglobin/ hematocrit thresholds used for red cell transfusion, focusing on two recent trials – ETTNO and TOP trials. This review reports that these trials found concordant and conclusive results without any difference in primary outcome, neurodevelopmental impairment at 2 years' corrected age or death before assessment within the range of hemoglobin transfusion thresholds studied. The review concludes that hemoglobin transfusion thresholds 11-13 g/dL for young critically ill or ventilated infants and 7-10 g/dL for stable infants not requiring significant respiratory support, can be safely used without expecting adverse consequences on survival or neurodevelopment.

[Growth failure in infants with neonatal abstinence syndrome in the neonatal intensive care unit](#)

Michael T Favara, Jessica Smith, Daniela Friedman, et al. *J Perinatol.*

This single-center retrospective study (2006-2018) investigated if infants with neonatal abstinence syndrome (NAS) are smaller at birth and have decreased growth parameters between birth and hospital discharge. Among 864 infants ≥ 35 weeks with NAS, the study showed that median percentiles were 30% (weight), 23% (HC) and length (37%), which decreased significantly ($p < 0.001$) at discharge to 12%, 6.5%, and 13%, respectively. The percentage of infants $< 3^{\text{rd}}$ percentile increased significantly ($p < 0.001$) in all growth parameters from birth to discharge. The study concluded that NAS infants are smaller at birth and have significant postnatal growth retardation.

[Zinc supplementation and the prevention and treatment of sepsis in young infants: a systematic review and meta-analysis](#)

Omar Irfan, Robert E Black, Zohra S Lassi, et al. *Neonatology.*

A systematic review and meta-analysis looked at 11 randomized controlled trials involving 2,819 infants. Preventive studies suggested a protective effect of zinc supplementation on neonatal mortality rate (NMR) (risk ratio (RR) 0.28; 95% CI 0.12-0.67, LOW certainty), but with no effect on the incidence of sepsis, both in preterm neonates. Among young infants, therapeutic zinc was associated with significant reductions in infant mortality-rate (RR 0.61; 95% CI 0.41-0.93, LOW certainty) and treatment failure (RR 0.61; 95% CI 0.44-0.85; LOW certainty). Therapeutic zinc supplementation in neonates was associated with significant increase in serum zinc concentrations (mean difference 81.97; 95% CI 34.57-129.37; LOW certainty), but without an effect on hospital stay or NMR.

[Reduction of severe intraventricular hemorrhage in preterm infants: a quality improvement project](#)

Katelin P Kramer, Kacy Minot, Colleen Butler, et al. *Pediatrics*.

A multidisciplinary team aimed to reduce severe IVH by 50% within 3 years. Interventions included development of practice guidelines that focused on protecting the sensory environment, minimizing blood pressure lability, and encouraging parent engagement. Additional interventions included the use of early noninvasive ventilation, consistent use of antenatal betamethasone, and risk-stratified use of indomethacin for IVH prophylaxis. The study included 268 infants born <28 weeks or <1000g. They reduced serious IVH from 14% to 1.2% and reduced mortality by 50%. There were no increases in morbidities. The authors show that implementation of a multi-pronged neuroprotective strategy is associated with improved short-term outcomes.

[Sixth-hour transcutaneous bilirubin and need for phototherapy in DAT positive newborns](#)

Michael F Papacostas, Dwight M Robertson, Matthew D McLean, et al. *Pediatrics*.

This is a retrospective study of 346 newborns with ABO incompatibility who had both transcutaneous bilirubin and total serum bilirubin tests at 6 hours after birth. The objective was to determine the predictive ability of transcutaneous bilirubin among infants with ABO incompatibility. Transcutaneous bilirubin was found to be nearly as accurate as total serum bilirubin and reticulocyte count. Low (<3.0 mg/dL) and high (≥ 5.3 mg/dL) risk TcB cutoffs demonstrated a negative predictive value of 98% and positive predictive value of 85%, respectively. The authors conclude that current screening recommendations are not cost effective. A six-hour transcutaneous bilirubin is noninvasive, inexpensive, and reliably accurate to identify infants at high risk of phototherapy in the first 24 hours.

[Umbilical cord milking in extremely preterm infants: a randomized controlled trial comparing cord milking with immediate cord clamping](#)

Justin B Josephsen, Shannon Potter, Eric S Armbricht, et al. *Am J Perinatol*.

This single-center randomized controlled trial included 56 infants between 24+0 to 27+6 weeks gestational age who were randomized to receive either umbilical cord milking (18 cm of cord milked three times) (UCM) or immediate cord clamping (ICC). There was no difference in the mean initial hemoglobin in the milking group compared with the ICC group, 13.7 ± 2.0 and 13.8 ± 2.6 g/dL, respectively ($p = 0.95$) and no difference in median number of blood transfusions after birth between the ICC and UCM groups, 2 (interquartile range [IQR]: 1-4) versus 2.5 (IQR: 1-5) ($p = 0.40$). There were also no differences in severe IVH, death, or neurodevelopmental outcomes at 15 to 18 months corrected gestational age.

[Intrauterine inflammation exacerbates maladaptive remodeling of the immature myocardium after preterm birth in lambs](#)

Amanda Vrselja, J Jane Pillow, Jonathan G Bensley, et al. *Pediatr Res*.

In preterm lambs, exposed antenatally to lipopolysaccharide, to mimic intra-uterine inflammation, there were distinct ventricular differences in cardiomyocyte growth and maturation trajectories as well as remodeling of the left ventricular myocardium compared to fetal controls observed. Antenatal exposure to lipopolysaccharide resulted in further collagen deposition in the left ventricle and a greater presence of immune cells in the preterm heart showing maladaptive cardiac remodeling and adversely impacts cardiomyocyte growth kinetics.

[Pulmonary and neurologic effects of mesenchymal stromal cell extracellular vesicles in a multifactorial](#)

Marissa A Lithopoulos, Lanna Strueby, Megan O'Reilly, et al. *Am J Respir Crit Care Med*.

In a multifactorial neonatal mouse model of lung injury and BPD, umbilical cord-mesenchymal stromal cell-derived extracellular vesicles, inserted intratracheally before ventilation, was shown to significantly

improve lung architecture, vessel formation, and inflammatory modulation. Additionally, it was shown to mitigate neuronal injury in the form of increased in vitro neurosphere formation and altered neural progenitor cell transcriptional signatures.

[Italian neonatologists and SARS-CoV-2: lessons learned to face coming new waves](#)

Maria Elena Cavicchiolo, Daniele Trevisanuto, Elena Priante, et al. *Pediatr Res*.

A joint European action plan is mandatory to face COVID-19 in neonates. This review summarizes available evidence from neonatal COVID-19 management in Italy. The current review can be useful in the management of the mother-neonate dyad during future waves of SARS-CoV-2

OTHER NOTEWORTHY PUBLICATIONS - March, 2022

COVID-19

Case report: neonatal cerebral venous thrombosis following maternal SARS-COV-2 infection in pregnancy

<https://pubmed.ncbi.nlm.nih.gov/35220305/>

Video-based reflection on neonatal interventions during COVID-19 using eye-tracking glasses: an observational study

<https://pubmed.ncbi.nlm.nih.gov/34413092/>

Titres and neutralising capacity of SARS-CoV-2-specific antibodies in human milk: a systematic review

<https://pubmed.ncbi.nlm.nih.gov/34257103/>

SARS-CoV-2 RNA and antibody detection in breast milk from a prospective multicentre study in Spain

<https://pubmed.ncbi.nlm.nih.gov/34417223/>

Effect of Coronavirus Disease-2019 on the workload of neonatologists

<https://pubmed.ncbi.nlm.nih.gov/34748740/>

Impact of Coronavirus Disease-19 “stay-at-home” orders on preterm birth in Colorado

<https://pubmed.ncbi.nlm.nih.gov/34717961/>

The epidemiology of respiratory syncytial virus in New York City during the Coronavirus Disease-2019 pandemic compared with previous years

<https://pubmed.ncbi.nlm.nih.gov/34728233/>

Italian neonatologists and SARS-CoV-2: lessons learned to face coming new waves

<https://pubmed.ncbi.nlm.nih.gov/33828228/>

Durability of anti-spike antibodies in infants after maternal covid-19 vaccination or natural infection

<https://pubmed.ncbi.nlm.nih.gov/35129576/>

SARS-CoV-2 positivity in offspring and timing of mother-to-child transmission: living systematic review and meta-analysis (PDF)

<https://www.bmj.com/content/bmj/376/bmj-2021-067696.full.pdf>

Transmission of SARS-CoV-2 from mother to baby is rare (PDF)

<https://www.bmj.com/content/bmj/376/bmj.o593.full.pdf>

Frequency, characteristics and complications of COVID-19 in hospitalized infants

<https://pubmed.ncbi.nlm.nih.gov/34955519/>

Association of gestational age at coronavirus disease 2019 (COVID-19) Vaccination, history of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection, and a vaccine booster dose with maternal and umbilical cord antibody levels at delivery

<https://pubmed.ncbi.nlm.nih.gov/34963127/>

Pediatrics

Ten-year survival of children with congenital anomalies: a European cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/35146505>

Sixth-hour transcutaneous bilirubin and need for phototherapy in DAT positive newborns

<https://www.ncbi.nlm.nih.gov/pubmed/35229125>

Influence of genetic information on neonatologists' decisions: a psychological experiment

<https://www.ncbi.nlm.nih.gov/pubmed/35169841>

Recommended childhood and adolescent immunization schedule: United States, 2022

<https://www.ncbi.nlm.nih.gov/pubmed/35176158>

Vitamin K and the newborn infant

<https://www.ncbi.nlm.nih.gov/pubmed/35190810>

Recognition and management of cardiovascular insufficiency in the very low birth weight newborn

<https://www.ncbi.nlm.nih.gov/pubmed/35224636>

Reduction of severe intraventricular hemorrhage in preterm infants: a quality improvement project

<https://www.ncbi.nlm.nih.gov/pubmed/35229127>

Improving time to independent oral feeding to expedite hospital discharge in preterm infants

<https://www.ncbi.nlm.nih.gov/pubmed/35229126>

Journal of Pediatrics

Coarctation of the aorta: delay in diagnosis and referral basis from infancy to adulthood

<https://pubmed.ncbi.nlm.nih.gov/34863817>

Characteristics of neonates with cardiopulmonary disease who experience seizures: a multicenter study

<https://pubmed.ncbi.nlm.nih.gov/34728234>

Neonatal anthropometrics and obesity treatment response in children and adolescents

<https://pubmed.ncbi.nlm.nih.gov/34774572>

Maternal exposure to air pollution is associated with neonatal jaundice: a retrospective cohort study

<https://pubmed.ncbi.nlm.nih.gov/34687690>

Placental findings in infants with hypoxic-ischemic encephalopathy: the importance of the comparison group

<https://pubmed.ncbi.nlm.nih.gov/34848190>

Ear abnormalities among children with fetal alcohol spectrum disorder: a systematic review and meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/34780779>

Seizure severity and treatment response in newborn infants with seizures attributed to intracranial hemorrhage

<https://pubmed.ncbi.nlm.nih.gov/34780777>

Noninvasive respiratory severity indices predict adverse outcomes in bronchopulmonary dysplasia

<https://pubmed.ncbi.nlm.nih.gov/34774575>

Multivariable predictive models of death or neurodevelopmental impairment among extremely low birth weight infants using heart rate characteristics

<https://pubmed.ncbi.nlm.nih.gov/34798080>

Utility of repeat testing for congenital hypothyroidism in infants with very low birth weight

<https://pubmed.ncbi.nlm.nih.gov/34748741>

Mortality risk factors among infants receiving dialysis in the neonatal intensive care unit

<https://pubmed.ncbi.nlm.nih.gov/34798078>

21-Deoxycortisol is a key screening marker for 21-hydroxylase deficiency

<https://pubmed.ncbi.nlm.nih.gov/34780778>

A pilot randomized trial of heart rate monitoring using conventional versus a new electrocardiogram algorithm during neonatal resuscitation at birth

<https://pubmed.ncbi.nlm.nih.gov/34715091>

Ventilatory strategies in infants with established severe bronchopulmonary dysplasia: a multicenter point prevalence study

<https://pubmed.ncbi.nlm.nih.gov/34710394>

The periorbital rash of neonatal lupus

<https://pubmed.ncbi.nlm.nih.gov/34864051>

Pediatric Research

Mediators of lifestyle intervention effects on neonatal adiposity: are we missing a piece of the puzzle?

<https://pubmed.ncbi.nlm.nih.gov/33753890/>

Adiponectin ameliorates hyperoxia-induced lung endothelial dysfunction and promotes angiogenesis in neonatal mice

<https://pubmed.ncbi.nlm.nih.gov/33767374/>

Novel variant in BRAT1 with the lethal neonatal rigidity and multifocal seizure syndrome

<https://pubmed.ncbi.nlm.nih.gov/33790413/>

Multichannel esophageal signals to monitor respiratory rate in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/34601494/>

Predictive performance and metabolite dynamics of proton MR spectroscopy in neonatal hypoxic-ischemic encephalopathy

<https://pubmed.ncbi.nlm.nih.gov/34489532/>

A critical evaluation of current definitions of necrotizing enterocolitis

<https://pubmed.ncbi.nlm.nih.gov/34021272/>

Noninvasive monitoring of evolving urinary metabolic patterns in neonatal encephalopathy

<https://pubmed.ncbi.nlm.nih.gov/33953355/>

Altered erythropoiesis in newborns with congenital heart disease

<https://pubmed.ncbi.nlm.nih.gov/33531673/>

Early probiotic supplementation with *B. infantis* in breastfed infants leads to persistent colonization at 1 year

<https://pubmed.ncbi.nlm.nih.gov/33762689/>

Transcriptome profiles discriminate between Gram-positive and Gram-negative sepsis in preterm neonates

<https://pubmed.ncbi.nlm.nih.gov/33767373/>

The interaction between diet and neurobehavior in very low birth weight infants

<https://pubmed.ncbi.nlm.nih.gov/33767376/>

Patent ductus arteriosus, tracheal ventilation, and the risk of bronchopulmonary dysplasia

<https://pubmed.ncbi.nlm.nih.gov/33790415/>

Surfactant protein D: a predictor for severity of community-acquired pneumonia in children

<https://pubmed.ncbi.nlm.nih.gov/33790414/>

Archives of Disease in Childhood - Fetal & Neonatal Edition

Review: Current evidence for prenatal and postnatal corticosteroids in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/33658282/>

Review: Red cell transfusion thresholds for preterm infants: finally some answers

<https://pubmed.ncbi.nlm.nih.gov/33906941/>

Outcomes in relation to early parenteral nutrition use in preterm neonates born between 30 and 33 weeks' gestation: a propensity score matched observational study

<https://pubmed.ncbi.nlm.nih.gov/34548324/>

Early versus later initiation of parenteral nutrition for very preterm infants: a propensity score-matched observational study

<https://pubmed.ncbi.nlm.nih.gov/34795009/>

Temporal trends in respiratory care and bronchopulmonary dysplasia in very preterm infants over a 10-year period in Spain

<https://pubmed.ncbi.nlm.nih.gov/34321246/>

Observational cohort study of changing trends in non-invasive ventilation in very preterm infants and associations with clinical outcomes

<https://pubmed.ncbi.nlm.nih.gov/34413093/>

Comparison of volume guarantee and volume-controlled ventilation both using closed loop inspired oxygen in preterm infants: a randomised crossover study (CLIO-VG study)

<https://pubmed.ncbi.nlm.nih.gov/34233907/>

Direct swallowing training and oral sensorimotor stimulation in preterm infants: a randomised controlled trial

<https://pubmed.ncbi.nlm.nih.gov/34281934/>

Head circumference, total cerebral volume and neurodevelopment in preterm neonates

<https://pubmed.ncbi.nlm.nih.gov/34261769/>

Characteristics of neonatal herpes simplex virus infections in Germany: results of a 2-year prospective nationwide surveillance study

<https://pubmed.ncbi.nlm.nih.gov/34257101/>

Growth in extremely preterm children born in England in 1995 and 2006: the EPICure studies

<https://pubmed.ncbi.nlm.nih.gov/34257100/>

Temporal trends of in utero and early postnatal transfer of extremely preterm infants between 2011 and 2016: a UK population study

<https://pubmed.ncbi.nlm.nih.gov/34281936/>

Oesophageal atresia: sonographic signs may prenatally predict surgical complexity

<https://pubmed.ncbi.nlm.nih.gov/34321245/>

Impact of personal protective equipment on neonatal resuscitation procedures: a randomised, cross-over, simulation study

<https://pubmed.ncbi.nlm.nih.gov/34489350/>

Catheter insertion depths in less-invasive surfactant administration

<https://pubmed.ncbi.nlm.nih.gov/34083353/>

Antenatal magnesium sulfate to prevent cerebral palsy

<https://pubmed.ncbi.nlm.nih.gov/34233908/>

Journal of Perinatology

Review: Methamphetamine: burden, mechanism and impact on pregnancy, the fetus, and newborn

<https://pubmed.ncbi.nlm.nih.gov/34785765/>

Neonatal opioid withdrawal syndrome: a review of the science and a look toward the use of buprenorphine for affected infants

<https://pubmed.ncbi.nlm.nih.gov/34556799/>

An assessment of dexmedetomidine as an opioid-sparing agent after neonatal open thoracic and abdominal operations

<https://pubmed.ncbi.nlm.nih.gov/34312472/>

Growth failure in infants with neonatal abstinence syndrome in the neonatal intensive care unit

<https://pubmed.ncbi.nlm.nih.gov/34381175/>

Clonidine for sedation in infants during therapeutic hypothermia with neonatal encephalopathy: pilot study

<https://pubmed.ncbi.nlm.nih.gov/34531532/>

Comparison of numerical and standard sarnat grading using the NICHD and SIBEN methods

<https://pubmed.ncbi.nlm.nih.gov/34392307/>

Value of cranial ultrasound at initiation of therapeutic hypothermia for neonatal encephalopathy

<https://pubmed.ncbi.nlm.nih.gov/34663900/>

Risk factors for neonatal encephalopathy in late preterm and term singleton births in a large California birth cohort

<https://pubmed.ncbi.nlm.nih.gov/34702969/>

Blanket temperature during therapeutic hypothermia and outcomes in hypoxic ischemic encephalopathy

<https://pubmed.ncbi.nlm.nih.gov/34999716/>

The association between early-onset sepsis and neonatal encephalopathy

<https://pubmed.ncbi.nlm.nih.gov/35001084/>

Association between anti-seizure medication and outcomes in infants

<https://pubmed.ncbi.nlm.nih.gov/34671100/>

Optimization of retinopathy of prematurity screening in a tertiary neonatal unit in Northern Greece based on 16-year data

<https://pubmed.ncbi.nlm.nih.gov/34471216/>

Efficacy and safety of mydriatic microdrops for retinopathy of prematurity screening: an external pilot crossover randomized controlled trial

<https://pubmed.ncbi.nlm.nih.gov/34654903/>

Utilizing near infra-red spectroscopy to identify physiologic variations during digital retinal imaging in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/35013587/>

Racial differences in growth rates and body composition of infants born preterm

<https://pubmed.ncbi.nlm.nih.gov/35067675/>

Household unmet basic needs in the first 1000 days and preterm birth status

<https://pubmed.ncbi.nlm.nih.gov/35102255/>

Parental mental health screening in the NICU: a psychosocial team initiative

<https://pubmed.ncbi.nlm.nih.gov/34580422/>

Perspective: Essentials of neonatal-perinatal medicine fellowship: part 2 - clinical education and experience

<https://pubmed.ncbi.nlm.nih.gov/33850281/>

Neonatology

Analgesation before less-invasive surfactant administration: a systematic review

<https://pubmed.ncbi.nlm.nih.gov/35124678/>

Demographic risk factors of retinopathy of prematurity: a systematic review of population-based studies

<https://pubmed.ncbi.nlm.nih.gov/35124682/>

Zinc supplementation and the prevention and treatment of sepsis in young infants: a systematic review and meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/35104826/>

Retinopathy of prematurity requiring treatment is closely related to head growth during neonatal intensive care unit hospitalization in very low birth weight infants

<https://pubmed.ncbi.nlm.nih.gov/35139511/>

Neonatal resuscitation practices in Europe: a survey of the union of European neonatal and perinatal societies

<https://pubmed.ncbi.nlm.nih.gov/35051924/>

Urine proteomics for noninvasive monitoring of biomarkers in bronchopulmonary dysplasia

<https://pubmed.ncbi.nlm.nih.gov/35073553/>

***Microrna expression profiles as diagnostic and prognostic biomarkers of perinatal asphyxia and hypoxic-ischaemic encephalopathy

<https://pubmed.ncbi.nlm.nih.gov/35073542/>

Consent for delivery room studies: what can be learned from perceptions of parents

<https://pubmed.ncbi.nlm.nih.gov/35184062/>

Early mental trajectories predict different cognitive levels at school age in very preterm children

<https://pubmed.ncbi.nlm.nih.gov/35124677/>

*Accuracy of a novel transcutaneous pCO₂ and pO₂ sensor with optical pO₂ measurement in neonatal intensive care: a single-centre prospective clinical trial

<https://pubmed.ncbi.nlm.nih.gov/35124680/>

Gastric transposition for repair of long-gap esophageal atresia: indications, complications, and outcome of minimally invasive and open surgery

<https://pubmed.ncbi.nlm.nih.gov/35235935/>

Body composition of preterm infants following rapid transition to enteral feeding

<https://pubmed.ncbi.nlm.nih.gov/35038714/>

Nucleated red blood cell counts of neonates born emergently 1–4 h after a maternal cardiac arrest

<https://pubmed.ncbi.nlm.nih.gov/35045419/>

Efficiency of continuous subcutaneous insulin infusion for premature neonate: a case report

<https://pubmed.ncbi.nlm.nih.gov/35130548/>

Feasibility of a novel ECG electrode placement method in newborn infants

<https://pubmed.ncbi.nlm.nih.gov/35130540/>

American Journal of Perinatology

Real-time safety audits of neonatal delivery room resuscitation areas: are we sufficiently prepared?

<https://pubmed.ncbi.nlm.nih.gov/32892327/>

Determination of accurate position of umbilical venous catheters in premature infants

<https://pubmed.ncbi.nlm.nih.gov/32882742/>

Utility of cerebrospinal fluid and serum procalcitonin for the diagnosis of neonatal meningitis

<https://pubmed.ncbi.nlm.nih.gov/32920797/>

The effect of a 20-hour baby-friendly hospital initiative training program on nurses' breastfeeding knowledge, attitudes and confidence, in a tertiary hospital in Singapore

<https://pubmed.ncbi.nlm.nih.gov/32911554/>

Hospital outcomes of infants with neonatal opioid withdrawal syndrome at a tertiary care hospital with high rates of concurrent nonopioid (polysubstance) exposure

<https://pubmed.ncbi.nlm.nih.gov/32892326/>

Weaning strategy of diuretics in outpatient preterm infants with bronchopulmonary dysplasia: a national survey

<https://pubmed.ncbi.nlm.nih.gov/32892324/>

Providing support for neonatal intensive care unit health care professionals: a bereavement debriefing program

<https://pubmed.ncbi.nlm.nih.gov/32894870/>

Single center outcome of multiple births in the premature and very low birth weight cohort in Singapore

<https://pubmed.ncbi.nlm.nih.gov/32916749/>

Decision to incision and risk for fetal acidemia, low apgar scores, and hypoxic ischemic encephalopathy

<https://pubmed.ncbi.nlm.nih.gov/32957140/>

Efficacy of circumferential intensive phototherapy in treating neonatal hyperbilirubinemia: a pilot study

<https://pubmed.ncbi.nlm.nih.gov/32950036/>

Length of neuromuscular re-education therapy and growth parameters in premature infants

<https://pubmed.ncbi.nlm.nih.gov/32916750/>

Umbilical cord milking in extremely preterm infants: a randomized controlled trial comparing cord milking with immediate cord clamping

<https://pubmed.ncbi.nlm.nih.gov/32894871/>

Are early-onset sepsis evaluations and empiric antibiotics mandatory for all neonates admitted with respiratory distress?

<https://pubmed.ncbi.nlm.nih.gov/32947642/>

Journal of Neonatal-Perinatal Medicine

No new content

Maternal Health, Neonatology and Perinatology

No new content

Neoreviews

Ethical considerations in neonatal research

<https://www.ncbi.nlm.nih.gov/pubmed/35229130>

Urinary tract dilation in the fetus and neonate

<https://www.ncbi.nlm.nih.gov/pubmed/35229134>

Genetic etiologies, diagnosis, and management of neonatal cystic kidney disease

<https://www.ncbi.nlm.nih.gov/pubmed/35229136>

Fluid homeostasis and diuretic therapy in the neonate

<https://www.ncbi.nlm.nih.gov/pubmed/35229135>

A term infant with a murmur and dysmorphic features

<https://www.ncbi.nlm.nih.gov/pubmed/35229132>

Preterm infant with craniofacial dysmorphic features and posture

<https://www.ncbi.nlm.nih.gov/pubmed/35229138>

Abnormal newborn screen during a pandemic

<https://www.ncbi.nlm.nih.gov/pubmed/35229131>

Umbilical cord entanglement

<https://www.ncbi.nlm.nih.gov/pubmed/35229137>

A newborn with an incidental finding on cranial ultrasound

<https://www.ncbi.nlm.nih.gov/pubmed/35229133>

Implementation of bubble continuous positive airway pressure in the delivery room and NICU

<https://www.ncbi.nlm.nih.gov/pubmed/35229139>

JAMA Pediatrics

Modeling genomic screening in newborns

<https://pubmed.ncbi.nlm.nih.gov/35072705>

BMC Pediatrics

Pain points in parents' interactions with newborn screening systems: a qualitative study (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-022-03160-1.pdf>

Determinants of birth asphyxia among newborns in Debre Berhan referral hospital, Debre Berhan, Ethiopia: a case-control study (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-022-03223-3.pdf>

A systematic review of newborn and childhood hearing screening around the world: comparison and quality assessment of guidelines (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-022-03234-0.pdf>

Survival status and predictors of mortality among preterm neonates admitted to neonatal intensive care unit of Addis Ababa public hospitals, Ethiopia, 2021. A prospective cohort study (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-022-03176-7.pdf>

Refractory thrombocytopenia could be a rare initial presentation of Noonan syndrome in newborn infants: a case report and literature review (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-021-02909-4.pdf>

Neonatal congenital mesoblastic nephroma that caused respiratory oncologic emergency early after birth: a case report (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-022-03210-8.pdf>

Analysis of communication and logistic processes in neonatal intensive care unit (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-022-03209-1.pdf>

Maternal dietary diversity and nutritional adequacy in relation with anthropometric measurements of newborns at birth: a cohort study in Tehran city (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-021-03102-3.pdf>

Effects of early essential newborn care versus routine birth care on physiological variables and sleep state among newborn infants: a quasi-experimental design (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-022-03194-5.pdf>

Association of fish oil containing lipid emulsions with retinopathy of prematurity: a retrospective observational study (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-022-03174-9.pdf>

Effect of later cord clamping on umbilical cord blood gas in term neonates of diabetic mothers: a randomized clinical trial (PDF)

<https://bmcpediatr.biomedcentral.com/track/pdf/10.1186/s12887-022-03170-z.pdf>

Pediatric Critical Care Medicine

Oral aversion in infants with congenital heart disease: a single-center retrospective cohort study
<https://pubmed.ncbi.nlm.nih.gov/34991136/>

New England Journal of Medicine

Nirsevimab for prevention of rsv in healthy late-preterm and term infants
<https://pubmed.ncbi.nlm.nih.gov/35235726/>

Pneumatosis intestinalis in necrotizing enterocolitis
<https://pubmed.ncbi.nlm.nih.gov/35275478/>

Hydrocortisone to prevent bronchopulmonary dysplasia — not a silver bullet
<https://pubmed.ncbi.nlm.nih.gov/35320649/>

Hydrocortisone to improve survival without bronchopulmonary dysplasia
<https://pubmed.ncbi.nlm.nih.gov/35320643/>

Lancet

No relevant content

JAMA

Association of neonatal hypoglycemia with academic performance in mid-childhood
<https://pubmed.ncbi.nlm.nih.gov/35315886/>

BMJ

Articles in COVID section

Pediatric Infectious Disease Journal

Clinical presentation, investigation and control of an outbreak of adenoviral conjunctivitis in a neonatal unit at a tertiary hospital
<https://pubmed.ncbi.nlm.nih.gov/35144268/>

Early predictors of poor neurologic outcomes in a prospective cohort of infants with antenatal exposure to zika virus
<https://pubmed.ncbi.nlm.nih.gov/35144270/>

Antimicrobial susceptibility profiles among neonatal early-onset sepsis pathogens
<https://pubmed.ncbi.nlm.nih.gov/34862339/>

Pediatric Cardiology

Screening and evaluation of neurodevelopmental impairments in infants under 6 months of age with congenital heart disease
<https://pubmed.ncbi.nlm.nih.gov/35190880/>

Lessons learned from infants with late detection of critical congenital heart disease
<https://pubmed.ncbi.nlm.nih.gov/34709442/>

Ductus arteriosus of extremely preterm twins is more resistant to cyclooxygenase inhibitors than those of singletons
<https://pubmed.ncbi.nlm.nih.gov/34716772/>

Combined echo and fluoroscopy-guided pulmonary valvuloplasty in neonates and infants: efficacy and safety
<https://pubmed.ncbi.nlm.nih.gov/34839381/>

Pediatric Neurology

Cerebrospinal fluid ion analysis in neonatal seizures
<https://pubmed.ncbi.nlm.nih.gov/35032885/>

Treatment of neonatal seizures: comparison of treatment pathways from 11 neonatal intensive care units

<https://pubmed.ncbi.nlm.nih.gov/34750046>

Obstetrics and Gynecology

Noninvasive prediction of congenital cytomegalovirus infection after maternal primary infection

<https://pubmed.ncbi.nlm.nih.gov/35115450/>

American Journal of Obstetrics & Gynecology

No relevant articles

Hospital Pediatrics

No relevant articles

BASIC SCIENCE SELECTIONS

Increases in ambient air pollutants during pregnancy are linked to increases in methylation of IL4, IL10, and IFN

Juan Aguilera, Xiaorui Han, Shu Cao, et al. *Clin Epigenetics*.

<https://www.ncbi.nlm.nih.gov/pubmed/35287715>

Increased airway liquid volumes at birth impairs cardiorespiratory function in preterm and near-term lambs

Shigeo Yamaoka, Kelly J Crossley, Annie R A McDougall, et al. *J Appl Physiol (1985)*.

<https://www.ncbi.nlm.nih.gov/pubmed/35271407>

Intrauterine inflammation exacerbates maladaptive remodeling of the immature myocardium after preterm birth in lambs

Amanda Vrselja, J Jane Pillow, Jonathan G Bensley, et al. *Pediatr Res*.

<https://www.ncbi.nlm.nih.gov/pubmed/35277596>

Comparative effects of bone marrow-derived versus umbilical cord tissue mesenchymal stem cells in an experimental model of bronchopulmonary dysplasia

Merline Benny, Benjamin Courchia, Sebastian Shrager, et al. *Stem Cells Transl Med*.

<https://www.ncbi.nlm.nih.gov/pubmed/35298658>

Temporal characterization of microglia-associated pro- and anti-inflammatory genes in a neonatal inflammation-sensitized hypoxic-ischemic brain injury model

Maria E Bernis, Yvonne SchleeHuber, Margit Zweyer, et al. *Oxid Med Cell Longev*.

<https://www.ncbi.nlm.nih.gov/pubmed/35281473>

Maternal cigarette smoke exposure exaggerates the behavioral defects and neuronal loss caused by hypoxic-ischemic brain injury in female offspring

Taida Huang, Xiaomin Huang, Hui Li, et al. *Front Cell Neurosci*.

<https://www.ncbi.nlm.nih.gov/pubmed/35250486>

Pulmonary and neurologic effects of mesenchymal stromal cell extracellular vesicles in a multifactorial lung injury model

Marissa A Lithopoulos, Lannae Strueby, Megan O'Reilly, et al. *Am J Respir Crit Care Med*.

<https://www.ncbi.nlm.nih.gov/pubmed/35286238>

Additional journal selections

A simple non-invasive biomarker can reflect both the acute and chronic pulmonary impact of patent ductus arteriosus (PDA) shunting

Alona Bin-Nun, Irina Shchors, Rawan Abu-Omar, et al. *Pediatr Pulmonol*.

<https://www.ncbi.nlm.nih.gov/pubmed/35243828>

Association between morphine exposure and impaired brain development on term-equivalent age brain magnetic resonance imaging in very preterm infants

Mountasser M Al-Mouqdad, Dima Z Jamjoom, Roya Huseynova, et al. *Sci Rep*.

<https://www.ncbi.nlm.nih.gov/pubmed/35296792>

Association of fish oil containing lipid emulsions with retinopathy of prematurity: a retrospective observational study

Rongqiang Yang, Hao Ding, Jing Shan, et al. *BMC Pediatr*.

<https://www.ncbi.nlm.nih.gov/pubmed/35236316>

Transfusion-free survival predicts severe retinopathy in preterm neonates

Luciana Teofili, Patrizia Papacci, Martina Bartolo, et al. *Front Pediatr*.

<https://www.ncbi.nlm.nih.gov/pubmed/35223696>

Altered grey matter cortical and subcortical T1-weighted/T2-weighted ratio in premature-born adults

Benita Schmitz-Koep, Aurore Menegaux, Christian Gaser, et al. *Biol Psychiatry Cogn Neurosci Neuroimaging*.

<https://www.ncbi.nlm.nih.gov/pubmed/35276405>

Early preterm infant microbiome impacts adult learning

Jing Lu, Lei Lu, Yueyue Yu, et al. *Sci Rep*.

<https://www.ncbi.nlm.nih.gov/pubmed/35228616>

Cord blood cell-free DNA concentration: a novel marker for neonatal wellbeing

Majdi Imterat, Offer Erez, Dan Tirosh, et al. *Am J Perinatol*.

<https://www.ncbi.nlm.nih.gov/pubmed/35240699>

Dexmedetomidine affects cerebral activity in preterm infants

Cristina Cortes-Ledesma, Luis Arruza, Angela Sainz-Villamayor, et al. *Arch Dis Child Fetal Neonatal Ed*.

<https://www.ncbi.nlm.nih.gov/pubmed/35288449>