Outreach

Your Outreach Librarian can help facilitate evidence-based practise for all PICU members of staff, as well as assisting with academic study and research. We can help with literature searching, obtaining journal articles and books, and setting up individual current awareness alerts.

Literature Searching

We provide a literature searching service for any library member. For those embarking on their own research it is advisable to book some time with one of the librarians for a 1 to 1 session where we can guide you through the process of creating a well-focused literature research and introduce you to the health databases access via NHS Evidence.

Critical Appraisal Training

We also offer one-to-one or small group training in literature searching, accessing electronic journals, and critical appraisal/Statistics. These are essential courses that teach how to interpret clinical papers.

Books

Books can be searched for using SWIMS our online catalogue at www.swims.nhs.uk. Books and journals that are not available on site or electronically may be requested from other locations. Please email requests to: thomas.osborne@uhbristol.nhs.uk
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Respiratory Syncytial Virus-Associated Mortality in Hospitalized Infants and Young Children
Early Weight Loss Nomograms for Exclusively Breastfed Newborns
Neuroimaging and Neurodevelopmental Outcome in Extremely Preterm Infants
Risk Factors for Exclusive E-Cigarette Use and Dual E-Cigarette Use and Tobacco Use in Adolescents
Psychosocial Outcomes of Fetal Alcohol Syndrome in Adulthood
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Growth Charts for Non-Growth Hormone Treated Prader-Willi Syndrome
Pediatric Germ Cell Tumors From 1987 to 2011: Incidence Rates, Time Trends, and Survival
Insulin and BMI as Predictors of Adult Type 2 Diabetes Mellitus
Neuroimaging and Neurodevelopmental Outcome in Extremely Preterm Infants
Risk Factors for Exclusive E-Cigarette Use and Dual E-Cigarette Use and Tobacco Use in Adolescents
Psychosocial Outcomes of Fetal Alcohol Syndrome in Adulthood
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Registry-Linked Electronic Influenza Vaccine Provider Reminders: A Cluster-Crossover Trial
Coparenting Breastfeeding Support and Exclusive Breastfeeding: A Randomized Controlled Trial
Breastfeeding Duration and Weight Gain Trajectory in Infancy
A 33-Month-Old With Fever and Altered Mental Status
Early Childhood Neurodevelopment After Intrauterine Growth Restriction: A Systematic Review
An Approach to Renal Masses in Pediatrics
Should We Tell Parents When We've Made an Error?
Summary of STARNet: Seamless Transitions and (Re)admissions Network
Maintaining Tradition While Fostering Change: Pediatrics in 2015
Hazardous Bedding in Infants' Sleep Environment Is Still Common and a Cause for Concern
Antimicrobial Stewardship in Pediatrics: A Good Beginning But We Have a Long Way to Go
Eradicating Polio: How the World's Pediatricians Can Help Stop This Crippling Illness Forever
Mobile and Interactive Media Use by Young Children: The Good, the Bad, and the Unknown
Hormonal Contraceptive Agents: A Need for Pediatric-Specific Studies
A Common Thread: Pediatric Advocacy Training
Precollege and In-College Bullying Experiences and Health-Related Quality of Life Among College Students
State-Specific Differences in School Sports Preparticipation Physical Evaluation Policies
Antimicrobial Stewardship Programs in Freestanding Children's Hospitals
Methylphenidate and the Risk of Trauma
Off-Label Prescribing in Pediatric Outpatients
Maternal Depressive Symptoms During Childhood and Risky Adolescent Health Behaviors
Prespisn for the Detection of Late-Onset Sepsis in Preterm Newborns
A School Health Center Intervention for Abusive Adolescent Relationships: A Cluster RCT
Validity of Self-Assessment of Pubertal Maturation
Family-Initiated Dialogue About Abusive Adolescent Relationships: A Cluster RCT


Editorial introductions
International adoption of children with birth defects: current knowledge and areas for further research
The National Institutes of Health undiagnosed diseases program
Advances in genetic prenatal diagnosis and screening
An approach to pediatric exome and genome sequencing
Copy number variations and human genetic disease
Status epilepticus in children
Pediatric status epilepticus: identification and evaluation
Consequences of febrile seizures in childhood
Pediatric status epilepticus management
Continuous electroencephalography for seizures and status epilepticus
Continuous infusion, general anesthesia and other intensive care treatment for uncontrolled status epilepticus
Multiple intestinal atresia with combined immune deficiency
Hyper-IgE syndromes: reviewing PGM3 deficiency
X-linked immunodeficiency with magnesium defect, Epstein–Barr virus infection, and neoplasia disease: a combined immune deficiency with magnesium defect
Human T follicular helper cells in primary immunodeficiencies
Recent advances in the understanding and management of long QT syndrome
Important considerations for the newborn: access to postdischarge newborn care, pulse oximetry screening for congenital heart disease, and circumcision

Current Opinion on Critical Care  February 2015 - Volume 21 - Issue 1

Editorial introductions
Noninvasive ventilation for acute respiratory failure
Hypercapnia: clinical relevance and mechanisms of action
Extracorporeal life support for severe acute respiratory distress syndrome
Novel approaches to minimize ventilator-induced lung injury
Balancing neuromuscular blockade versus preserved muscle activity
Monitoring and preventing diaphragm injury
Stem cells for respiratory failure
Selecting the “right” positive end-expiratory pressure level
Neurally adjusted ventilatory assist
How to ventilate patients without acute respiratory distress syndrome?
Discontinuation of ventilatory support: new solutions to old dilemmas
Prevention of acute respiratory distress syndrome

Paediatric Critical Care Medicine  November 2014 - Volume 15 - Issue 9 - p 797

PCCM 2014: Extracorporeal Support and More
Pediatric Severe Sepsis in U.S. Children’s Hospitals*
RBC Transfusion in Pediatric Patients Supported With Extracorporeal Membrane Oxygenation: Is There an Impact on Tissue Oxygenation?*
An Epidemiologic Survey of Pediatric Sepsis in Regional Hospitals in China*
Pediatric Intensive Care Outcomes: Development of New Morbidities During Pediatric Critical Care*
Pediatric Severe Sepsis: Current Trends and Outcomes From the Pediatric Health Information Systems Database*
Comparative Effectiveness of Digoxin and Propranolol for Supraventricular Tachycardia in Infants*
Greater Fluctuations in Serum Sodium Levels Are Associated With Increased Mortality in Children With Externalized Ventriculostomy Drains in a PICU*
Implementation of an Extracorporeal Cardiopulmonary Resuscitation Simulation Program Reduces Extracorporeal Cardiopulmonary Resuscitation Times in Real Patients*
Extracorporeal Cardiopulmonary Resuscitation: A Single-Center Experience*
Extubation During Pediatric Extracorporeal Membrane Oxygenation: A Single-Center Experience*
Predictors of Mortality in Pediatric Patients on Venoarterial Extracorporeal Membrane Oxygenation*
Pediatric Perioperative Cardiac Arrest and Mortality: A Study From a Tertiary Teaching Hospital*
Sedation Guidelines, Protocols, and Algorithms in PICUs: A Systematic Review
Sepsis or SEPSIS: Does It Make a Difference?*
How to Guide Transfusion Decision-Making? That Is the Question*
The Tremendous Burden of Sepsis on China’s Youngest Children*
Are We Exchanging Morbidity for Mortality in Pediatric Intensive Care?*
Sepsis in Children: A Dark Cloud With a Silver Lining*
Treatment of a Mostly Self-Limiting Disease: Keep It Simple and Safe*
Connecting the Dots: From Time Point to Trajectory Analysis of Serum Sodium Levels in Pediatric Neurologic Injury*
Enhancing the Power of Simulation for Complex Clinical Care*
Extracorporeal and Extracorporeal Membrane Oxygenation: What a Difference a Decade Makes!!*
Is This Heart Going to Work?*
Pediatric Perioperative Outcomes in the Developing World: Where Are We Now?*
Diastolic Dysfunction in Children With Septic Shock: Does It Help Us Manage Our Patients?*
Liquid Ventilation in Congenital Diaphragmatic Hernia: Back on Stage?*
What Are the New Perspectives in Rehabilitation in the PICU Using Traditional Techniques?*
The author replies
What Is the Meaning of Hypertension in the PICU?*
The authors reply
Prevalence and Outcome of Diastolic Dysfunction in Children With Fluid Refractory Septic Shock—A Prospective Observational Study*
Intrapulmonary Instillation of Perfluorooctylbromide Improves Lung Growth, Alveolarization, and Lung Mechanics in a Fetal Rabbit Model of Diaphragmatic Hernia*
Increase in Oxygen Consumption After Albuterol Inhalation in Ventilated Infants and Children
National Conference & Exhibition October 12, 2014 — San Diego, CA
Online Abstract Translations

**Pediatric Anesthesia** Volume 25, Issue 1

Determination of the 95% effective dose of remifentanil for the prevention of coughing during extubation in children undergoing tonsillectomy (with or without adenoidectomy)
A randomized comparison of the i-gel™ with the self-pressurized air-Q™ intubating laryngeal airway in children
Dexmedetomidine vs midazolam as preanesthetic medication in children: a meta-analysis of randomized controlled trials
A comparison of functional magnetic resonance imaging findings in children with and without a history of early exposure to general anesthesia
Propylphylactic methylprednisolone to reduce inflammation and improve outcomes from one lung ventilation in children: a randomized clinical trial
Comparison of Pediatric perioperative risk assessment by ASA physical status and by NARCO-SS (neurological, airway, respiratory, cardiovascular, other–surgical severity) scores
Propofol–ketamine or propofol–remifentanil for deep sedation and analgesia in pediatric patients undergoing burn dressing changes: a randomized clinical trial
A Pilot study to determine whether visually evoked hemodynamic responses are preserved in children during inhalational anesthesia
The development of pediatric anesthesia and intensive care in Scandinavia
A change in anticoagulation monitoring improves safety, reduces transfusion, and reduces costs in infants on cardiopulmonary bypass
Propylphylactic versus reactive transfusion of thawed plasma in patients undergoing surgical repair of craniosynostosis: a randomized clinical trial
Intraoperative optimization to decrease postoperative PRBC transfusion in children undergoing craniofacial reconstruction

Effects of a restrictive fluid regimen in pediatric patients undergoing major abdominal surgery

Ultrasound assessment of gastric volume in the fasted pediatric patient undergoing upper gastrointestinal endoscopy: development of a predictive model using endoscopically suctioned volumes

The pressure drop across the endotracheal tube in mechanically ventilated pediatric patients

Simulated fluid resuscitation for toddlers and young children: effect of syringe size and hand fatigue

Intranasal dexmedetomidine premedication reduces minimum alveolar concentration of sevoflurane for laryngeal mask insertion and emergence delirium in children: a prospective, randomized, double-blind, placebo-controlled trial

Raising the bar for pediatric sedation studies and trials

Fond farewell

Monitoring depth of anesthesia: from consciousness to nociception. A window on subcortical brain activity

Bradycardia in perspective—not all reductions in heart rate need immediate intervention

The ‘Can't Intubate Can't Oxygenate’ scenario in pediatric anesthesia: a comparison of the Melker cricothyroidotomy kit with a scalpel bougie technique

Are new supraglottic airway devices, tracheal tubes and airway viewing devices cost-effective?

Perioperative respiratory complications following awake and deep extubation in children undergoing adenotonsillectomy

Lumbar punctures in thrombocytopenic children with cancer

Systematic Review and Meta-Analysis of benefits and risks between normothermia and hypothermia during cardiopulmonary bypass in pediatric cardiac surgery

Anesthesia and the pediatric cardiac catheterization suite: a review

Dose effect of local anesthetics on analgesic outcomes for the transversus abdominis plane (TAP) block in children: a randomized, double-blind, clinical trial

Emergency pediatric anesthesia – accessibility of information

Confirmation of local anesthetic distribution by radio-opaque contrast spread after ultrasound guided infraclavicular catheters placed along the posterior cord in children: a prospective analysis

Total intravenous anesthesia will supercede inhalational anesthesia in pediatric anesthetic practice

Through the Glass Darkly: searching for safety signals in physiological monitoring

A comparative study of Laryngeal Mask Airway size 1 vs i-gel size 1 in infants undergoing daycare procedures

Assessment of three placement techniques for individualized positioning of the tip of the tracheal tube in children under the age of 4 years

Perioperative pulmonary aspiration is infrequent and low risk in pediatric anesthetic practice

Sedation monitoring during open muscle biopsy in children by Comfort Score and Bispectral Index – a prospective analysis

Pain in children – are we accomplishing the optimal pain treatment?

Anesthesia-related neurotoxicity and the developing animal brain is not a significant problem in children

Treating perioperative anxiety and pain in children: a tailored and innovative approach

Rapid sequence induction has no use in pediatric anesthesia

Awake caudals and epidurals should be used more frequently in neonates and infants

A new twist in the pediatric difficult airway

Evaluation of the minimum volume of salvage blood required for the successful use of two different autotransfusion devices

Effect of carboxyhemoglobin on postoperative complications and pain in pediatric tonsillectomy patients

Neurosurgical conditions and procedures in infancy are associated with mortality and academic performances in adolescence: a nationwide cohort study

Pediatric airway anatomy may not be what we thought: implications for clinical practice and the use of cuffed endotracheal tubes

Adjuncts should always be used in pediatric regional anesthesia

Sevoflurane anesthesia and brain perfusion

Anesthetic considerations in myofibrillar myopathy

Tracheal intubation with the Bonfils fiberscope in the difficult pediatric airway: a comparison with fiberoptic intubation

Development of an optimal sampling schedule for children receiving ketamine for short-term procedural sedation and analgesia

Comparison of actual oxygen delivery kinetics to those predicted by mathematical modeling following stage 1 palliation just prior to superior cavopulmonary anastomosis

Electroencephalography for children with autistic spectrum disorder: a sedation protocol

Blood transfusion in patients treated with surgery for necrotizing enterocolitis
Noninvasive cardiac output monitoring using bioreactance-based technique in pediatric patients with or without ventricular septal defect during anesthesia: in comparison with echocardiography
Intraoperative apnea in children after buffered 5% povidone-iodine site sterilization for strabismus surgery
Clinical utility of B-type natriuretic peptide (NP) in pediatric cardiac surgery – a systematic review
Continuous noninvasive cardiac output in children: is this the next generation of operating room monitors?
Initial experience in 402 pediatric patients
Noninvasive cardiac output measurement using bioreactance in postoperative pediatric patients
Pressure recording analytical method and bioreactance for stroke volume index monitoring during pediatric cardiac surgery

New NICE Guidance

Child abuse and neglect (GID-SCWave0708) TBC NICE guidelines

Children's attachment (GID-CGWAVE0675) October 2015 NICE guidelines

End of life care for infants, children and young people (GID-CGWAVE0730) TBC NICE guidelines

Gastro-oesophageal reflux in children and young people (GID-CGWAVE0599) January 2015 NICE guidelines

Intravenous fluids therapy in children (GID-CGWAVE0655) October 2015 NICE guidelines

Kidney transplantation (children, adolescents) - immunosuppressive regimens (review of TA99) [ID346] (GID-TAG255) January 2016 Technology appraisals

Management of vomiting in children and young people with gastroenteritis: ondansetron (ESUOM34) October 2014

Antibiotics for neonatal infection (QS75) December 2014

Latest relevant Systematic Reviews from the Cochrane Library

If you require full articles, or a more enhanced search of any of the below topics please email me @ Thomas.Osborne@UHBristol.nhs.uk

Iron therapy in anaemic adults without chronic kidney disease
Kurinchi Selvan Gurusamy, Myura Nagendran, Jack F Broadhurst, Stefan D Anker and Toby Richards
December 2014

Immunonutrition as an adjuvant therapy for burns
Hannah B Tan, Stefan Danilla, Alexandra Murray, Ramón Serra, Regina El Dib, Tom OW Henderson and Jason Wasiak
December 2014
Early versus delayed oral fluids and food for reducing complications after major abdominal gynaecologic surgery
Kittipat Charoenkwan and Elizabeth Matovinovic
December 2014

Different durations of corticosteroid therapy for exacerbations of chronic obstructive pulmonary disease
Julia AE Walters, Daniel J Tan, Clinton J White and Richard Wood-Baker
December 2014

Preventing occupational stress in healthcare workers
Jani H Ruotsalainen, Jos H Verbeek, Albert Mariné and Consol Serra
December 2014

Timing of intravenous prophylactic antibiotics for preventing postpartum infectious morbidity in women undergoing cesarean delivery
A. Dhanya Mackeen, Roger E Packard, Erika Ota, Vincenzo Berghella and Jason K Baxter
December 2014

Daily sedation interruption versus no daily sedation interruption for critically ill adult patients requiring invasive mechanical ventilation
Lisa Burry, Louise Rose, Iain J McCullagh, Dean A Fergusson, Niall D Ferguson and Sangeeta Mehta
December 2014

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**NHS Behind the Headlines**

**Our health news predictions for 2015**

Friday Jan 2 2015

A few days ago we looked at The Guardian’s health news predictions for 2014. So we decided to see if we could better the newspaper’s efforts by providing our own health predictions for 2015…

**How to read health news**

Tuesday Dec 23 2014

If you’ve just read a health-related headline that has caused you to spit out your morning coffee (“Coffee causes cancer” usually does the trick), it’s always best to...

**Academic hype ‘distorting’ health news**

Wednesday Dec 10 2014
"Science and health news hype: where does it come from?" The Guardian asks. A new study suggests a lot of the hype comes from academics themselves, or at least their press offices, as many press releases contain exaggerations…

**New activity in Uptodate/DynaMed**

**Isolated loss of consciousness in children with minor head trauma (October 2014)**

Loss of consciousness (LOC) following minor head trauma is frequently used to make decisions regarding neuroimaging. However, new data suggest that the risk of clinically important traumatic brain injury (cTBI) that requires neurosurgical intervention, endotracheal intubation for 24 hours, or hospitalization for at least two days is low in the setting of brief, isolated LOC without any other clinical predictors. In a large multicenter, prospective cohort study of more than 5,000 children with LOC after mild head trauma, 0.5 percent of children with isolated LOC, defined as LOC but otherwise meeting validated clinical predictors indicating very low risk for cTBI (table 2), had cTBI compared with 4 percent of children with LOC and not meeting at least one of these criteria [18]. In this study, duration of LOC longer than five seconds was also associated with significantly greater risk of cTBI. These findings support the conclusion that children with minor head trauma and isolated LOC of less than five seconds do not routinely require neuroimaging. (See "Minor head trauma in infants and children: Evaluation", section on 'Approach' and "Minor head trauma in infants and children: Evaluation", section on 'Loss of consciousness'.)

**Emergency department thoracotomy in children (October 2014)**

Among adults, survival after emergency thoracotomy for thoracic trauma approaches 20 percent in patients with isolated stab wounds to the heart but is extremely rare in those with blunt trauma, multiple gunshot wounds to the chest, or no signs of life in the field (≤1 percent for each group). Evidence is more limited for outcomes in children. In an observational study of 316 children (mean age 15 years) who underwent thoracotomy within one hour of emergency presentation and were treated in a level one trauma center, 31 percent of patients survived to discharge, including 19 percent of 70 patients with blunt trauma and 34 percent of those with penetrating trauma [19]. Survival dropped to 5 percent in patients presenting with heart rate ≤70 beats per minute or systolic blood pressure ≤50 mmHg, regardless of trauma type. These data suggest that initial vital signs are more important than type of trauma when deciding whether or not to perform emergency thoracotomy in adolescents. (See "Initial evaluation and management of penetrating thoracic trauma in adults", section on 'Overview and survival' and "Initial evaluation and stabilization of children with thoracic trauma", section on 'Emergency department thoracotomy'.)

**Dimercaptosuccinic acid for treatment of severe pediatric lead poisoning (November 2014)**
Parenteral dimercaprol (2,3-dimercapto-1-propanol or BAL) and calcium disodium edetate (CaNa2EDTA) are the recommended treatments for severe lead poisoning in children. However, oral chelation with dimercaptosuccinic acid (DMSA) may be an option if BAL and CaNa2EDTA are not available or cannot be safely administered. This was demonstrated in a retrospective study of 1,156 Nigerian children, of whom over one-third had venous blood lead levels ≥80 ug/dL \[\text{1}\]. DMSA successfully decreased venous blood lead levels and was associated with clinical improvement. Minimal adverse effects, primarily moderate serum alanine aminotransferase (ALT) elevations, occurred during <2.5 percent of over 3,000 treatment courses. Mortality for all children (including those without severe lead poisoning) was 2 percent during the period of the study. (See "Childhood lead poisoning: Management", section on 'Initial chelation therapy'.)

**Fatality due to contaminated probiotic in a preterm infant (November 2014)**

In October 2014, a fatal case of mucormycosis caused by *Rhizopus oryzae* was reported in a premature infant who received the probiotic supplement Solgar ABC Dophilus® Powder for prevention of necrotizing enterocolitis (NEC) \[\text{8}\]. Investigation by the Centers for Disease Control and Prevention (CDC), Food and Drug Administration (FDA), and Connecticut Departments of Public Health and Consumer Protection of the same lot of unopened Solgar ABC Dophilus® Powder revealed contamination with *Rhizopus oryzae*. As a result, the CDC sent out a Health Alert on November 25, 2014 that recommends Solgar ABC Dophilus not be used in infants, and that any patient who received this product in the last 30 days be evaluated and empiric antifungal therapy be considered in consultation with an infectious disease specialist. This case supports our current practice of NOT routinely using probiotic therapy to prevent NEC until strict criteria are met for manufacturing and regulation of probiotic products, and there are reliable data for optimal administration of these products. (See "Mucormycosis (zygomycosis)", section on 'Healthcare-associated' and "Prevention of necrotizing enterocolitis in newborns", section on 'Probiotics'.)

**Low Apgar scores: Predictors of neonatal and infant deaths (November 2014)**

Although not used to guide resuscitation, Apgar scores, first introduced in 1953, have been used as a measure of the newborn's overall clinical status and response to resuscitation during the first minutes after delivery. The accurate predictability of low Apgar scores for mortality was confirmed by a study that reviewed discharge and mortality data for all births in Scotland between 1992 and 2010 \[\text{9}\]. Linear regression analysis showed Apgar scores ≤3 at five minutes, compared with normal scores (between 7 and 10), were associated with 300-fold increased risk of early neonatal death (birth to seven days of life), 30-fold increased risk of late neonatal death (7 to 28 days of life), and 50-fold increased infant death (up to one year of age). (See "Neonatal resuscitation in the delivery room", section on 'Apgar scores'.)

**Indomethacin not a risk factor for spontaneous intestinal perforation in ELBW infants (November 2014)**

An earlier study of extremely low birth weight (ELBW) infants (birth weight <1000 g) from the National Institute of Child Health and Human Development (NICHD) Neonatal Research Network had reported an association between spontaneous intestinal perforation (SIP) and the administration of
Indomethacin as medical therapy for patent ductus arteriosus closure in preterm infants [10]. A subsequent NICHHD study of ELBW infants enrolled from 1999 to 2010 compared ELBW infants for exposure to two factors that might impact the incidence of SIP: indomethacin and early feedings (which improves nutritional outcomes but may increase the risk of SIP) [11]. In this cohort, the risk of SIP was the same for infants exposed to indomethacin with or without early feeding. The risk of SIP was lower for infants who received indomethacin and were fed early compared with those who did not receive either indomethacin or early feeding. These results suggest that SIP is not an adverse event of indomethacin exposure. (See "Spontaneous intestinal perforation of the newborn", section on ‘Exposure to indomethacin’.)

Transcutaneous bilirubin measurements after discontinuation of phototherapy in neonates
(November 2014)

In neonates, transcutaneous bilirubin (TcB) measurement devices are used to estimate total serum or plasma bilirubin (TB), thereby reducing the need for blood sampling. While TcB measurements are typically lower than TB, the degree of underestimation is greater in infants with high TB levels (>15 mg/dL [257 micromol/L]), dark-skinned infants, and during phototherapy. In these settings, TB may be needed to accurately determine the magnitude of hyperbilirubinemia. A German study has also reported TcB underestimation of TB is greater within the first eight hours of discontinuation of phototherapy [12]. This difference between TcB and TB measurements subsequently decreases, and returns to pretreatment values 24 hours after discontinuation of phototherapy. As a result, clinicians must take into consideration the timing of TcB measurement in relationship to discontinuation of phototherapy. If there is any question regarding the validity of TcB measurements, TB should be obtained to assess the degree of neonatal hyperbilirubinemia. (See "Evaluation of unconjugated hyperbilirubinemia in term and late preterm infants", section on 'Transcutaneous bilirubin'.)

Dehydration and hypovolemia in infants and children

Immune thrombocytopenia (ITP)

Surgical site infection - prevention

review of disorders of plasma sodium (N Engl J Med 2015 Jan) 01/05/2015 11:38:00 AM

intracerebral hemorrhage rate 1% and severe bleeding rate 15% in patients with primary ITP (J Thromb 10:43:00 AM Haemost 2014 Dec 12 early online)

tissue adhesives may have similar rate of surgical wound infection compared to adhesive tapes or staples; limited evidence to evaluate effect on dehiscence (Cochrane 01/05/2015 06:05:00 AM)
<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
<th>Date</th>
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<tbody>
<tr>
<td>Alport syndrome</td>
<td>Cochlear implantation may be considered in children &gt; 1 year old with severe-to-profound hearing loss. (GeneReviews 2014 Jan 9)</td>
<td>01/01/2015</td>
</tr>
<tr>
<td>Tibial plateau fracture</td>
<td>Oral morphine does not further reduce pain but increases risk of adverse events compared to oral ibuprofen. (CMAJ 2014 Dec 9)</td>
<td>12/31/2014</td>
</tr>
<tr>
<td>Ulcerative colitis</td>
<td>5-ASA compounds associated with reduced risk of colorectal neoplasia in patients with ulcerative colitis. (PLoS One 2014)</td>
<td>12/31/2014</td>
</tr>
<tr>
<td>Infantile colic</td>
<td>Probiotic <em>Lactobacillus reuteri</em> supplement may reduce crying in exclusively breastfed infants with colic. (J Pediatr 2015 Jan)</td>
<td>12/31/2014</td>
</tr>
<tr>
<td>Immotile cilia syndrome</td>
<td>Later onset of neonatal respiratory distress, longer duration of oxygen therapy, situs inversus, and lobar collapse or consolidation on chest x-ray associated with increased risk of primary ciliary dyskinesia in term neonates with respiratory distress. (Pediatrics 2014 Dec)</td>
<td>12/31/2014</td>
</tr>
<tr>
<td>Cerebral palsy (CP)</td>
<td>Review of nonoral feeding for children and youth with developmental or acquired disabilities. (Pediatrics 2014 Dec)</td>
<td>12/30/2014</td>
</tr>
</tbody>
</table>
Cleft lip and palate: review of nonoral feeding for children and youth with developmental or acquired disabilities (Pediatrics 2014 Dec)

Spina bifida: review of nonoral feeding for children and youth with developmental or acquired disabilities (Pediatrics 2014 Dec)

Parapneumonic effusion and empyema in children: VATS appears to have similar outcomes to urokinase in children with septated parapneumonic empyema requiring chest tube drainage (Pediatrics 2014 Nov)

Vesicoureteral reflux: continuous antibiotic prophylaxis may decrease recurrent febrile or symptomatic urinary tract infection in children with vesicoureteral reflux but may not reduce risk for new renal scarring (J Urol 2014 Sep 4 early online)

Perinatal stroke: perinatal hypoxia factors associated with increased risk of arterial ischemic stroke (PLoS One 2014)

Appendicitis: point-of-care ultrasound by pediatric emergency physician may inform likelihood of appendicitis in children and adolescents with suspected appendicitis (Acad Emerg Med 2014 Feb)

Influenza antiviral treatment and prophylaxis: addition of IV peramivir does not appear to reduce symptom duration in hospitalized patients with influenza treated with oseltamivir
Atopic dermatitis

daily emollient therapy may prevent atopic dermatitis in high-risk neonates (J Allergy Clin Immunol 2014 Oct)

Mixed connective tissue disease

review of vaccines and biologics (Ann Rheum Dis 2014 Aug)

Pyloric stenosis

trained pediatric emergency physicians appear 100% concordant with radiologists in identifying or ruling out hypertrophic pyloric stenosis by ultrasound (Acad Emerg Med 2013 Jul)

Feeding the premature infant

delayed introduction of progressive enteral feeds may not reduce risk of necrotizing enterocolitis or death in very low-birth-weight infants (Cochrane Database Syst Rev 2014 Dec 1)

Recent PICU Lit Searches

Below is a sample of Literature Searches carried out by our librarians for members of staff in PICU. For further details please email Thomas.Osborne@UHBristol.nhs.uk
Mucousitis
Avascular Necrosis
Wong-Baker scale (children’s pain visual analogue scale)
Itchman scale (children’s itch/discomfort measuring scale)
Visual analogue scale (adult pain measuring scale)
Vancouver scar assessment
Patient and observer scar assessment scales
Infections in paediatric burns patients
COPD (chronic obstructive pulmonary disease/chronic obstructive airways disease)/respiratory disease combined with nutritional requirements/treatments could be as food/supplements/nasogastric tube feeding/enteral feeding, macro or micronutrients.
PDA aneurysm, neonate, and ACTA2
ACTA2 and cardiac surgery
ACTA2 mutation in neonates/infants

Quick Exercise

Fill in the gaps in the pyramid of evidence…

Current Awareness Database Articles
If you require full articles, or a more enhanced search of any of the below topics please email me @
Title: Implementation of standardized dosing units for i.v. medications

Citation: American Journal of Health-System Pharmacy, December 2014, vol./is. 71/24(2153-2158), 1079-2082;1535-2900 (15 Dec 2014)

Author(s): Jung B., Couldry R., Wilkinson S., Grauer D.

Abstract: Purpose: The implementation of standardized dosing units for six i.v. medications at an academic medical center is described. Summary: During the implementation of an electronic health record system at an academic medical center, it was noticed that providers could order some i.v. medications in multiple dosing units, including epinephrine, isoproterenol, midazolam, nitroglycerin, norepinephrine, and phenylephrine. Possible options to standardize i.v. medications along with their pros and cons were presented for discussion to key providers in all of the intensive care units. Once the providers agreed on a solution, the information was presented to the pharmacy and therapeutics committee for final approval. A nursing education plan was created before and after implementation of dosing-unit standardization to determine the effectiveness of nursing education on compliance with the standardization of the dosing units for the listed medications. The survey was designed to evaluate, when given a choice, what dosing units nurses would use to administer epinephrine, isoproterenol, midazolam, nitroglycerin, norepinephrine, and phenylephrine. The decision was made by the key providers to use weight-based dosing-micrograms per kilograms per minute-to allow for consistency of use of these medications for pediatric and adult patients. Nursing education was completed to ensure that nurses were aware of how to safely administer these medications using the new dosing units. Conclusion: Dosing-unit standardization for dose-Adjustable i.v. infusions can provide improved consistency and decrease the potential for dosing errors when administering epinephrine, isoproterenol, midazolam, nitroglycerin, norepinephrine, and phenylephrine.

Title: Factors Influencing the Peripheral Venous Catheter Survival in Critically Ill Children in a Pediatric Intensive Care Unit

Citation: Indian Journal of Pediatrics, December 2014, vol./is. 81/12(1293-1296), 0019-5456;0973-7693 (04 Dec 2014)

Author(s): Shenoy S., Karunakar B.P.

Abstract: Objectives: To study the duration of the peripheral venous catheter access and the effect of variables such as intravenous fluid, medications and blood products on the life span of the catheter in authors' pediatric intensive care unit.

Title: Decision Making for Life Sustaining Therapies in Pediatric Intensive Care: Who Should Decide?

Citation: Indian Journal of Pediatrics, December 2014, vol./is. 81/12(1283-1284), 0019-5456;0973-7693 (04 Dec 2014)

Author(s): Khilnani P.

Language: English

Title: Shared Decision-Making in Pediatric Intensive Care Units: A Qualitative Study with Physicians, Nurses and Parents

Citation: Indian Journal of Pediatrics, December 2014, vol./is. 81/12(1287-1292), 0019-5456;0973-7693 (04 Dec 2014)

Author(s): Kahveci R., Ayhan D., Doner P., Cihan F.G., Koc E.M.
Abstract: Objectives: To understand how decisions are made in Intensive Care Unit (ICU) settings where critically-ill children require life-support decisions and what are the perceptions of health professionals and parents.

Title: Comparison of Two New Generation Pulse Oximeters with Arterial Oxygen Saturation in Critically Ill Children

Citation: Indian Journal of Pediatrics, December 2014, vol./is. 81/12(1297-1301), 0019-5456;0973-7693 (04 Dec 2014)

Author(s): Jose B., Lodha R., Kabra S.K.

Language: English

Abstract: Objectives: To compare the performance of two new generation pulse oximeters, one with enhanced signal extraction technology (SET) and other without enhanced SET in detecting hypoxemia and to correlate it with arterial blood gas analysis.

Title: Minimizing the risk of preoperative brain injury in neonates with aortic arch obstruction

Citation: Journal of Pediatrics, December 2014, vol./is. 165/6(1116-1122.e3), 0022-3476;1097-6833 (01 Dec 2014)


Abstract: Objective To determine whether prenatal diagnosis lowers the risk of preoperative brain injury by assessing differences in the incidence of preoperative brain injury across centers.

Title: Family participation during intensive care unit rounds: Goals and expectations of parents and health care providers in a tertiary pediatric intensive care unit

Citation: Journal of Pediatrics, December 2014, vol./is. 165/6(1245-1251.e1), 0022-3476;1097-6833 (01 Dec 2014)

Author(s): Stickney C.A., Ziniel S.I., Brett M.S., Truog R.D.

Abstract: Objective To compare perceptions, goals, and expectations of health care providers and parents regarding parental participation in morning rounds and target specific areas of opportunity for educational interventions

Title: The incidence and risk factors of gastrointestinal complications after hepatectomy: A retrospective observational study of 1329 consecutive patients in a single center

Citation: Journal of Surgical Research, December 2014, vol./is. 192/2(440-446), 0022-4804;1095-8673 (01 Dec 2014)

Language: English

Abstract: Background: Despite of the importance of gastrointestinal (GI) complications in morbidity and mortality after major and moderate surgeries, it is not yet specifically studied in patients undergoing hepatectomy. This study was aimed to investigate the in-hospital incidence and potential risk factors of GI complications after open hepatectomy in our hospital.

Title: Recurrent langerhans cell histiocytosis with near total skin loss, sepsis, and ards

Citation: Critical Care Medicine, December 2014, vol./is. 42/12 SUPPL. 1(A1661), 0090-3493 (December)

Author(s): Skattum A., Smith C.
Abstract: Learning Objectives: A 30 year old male presented with an acute onset of a diffuse dry erythematous rash. His past medical history was significant for Langerhans cell histiocytosis (LCH) previously treated with chemotherapy and radiation. The rash quickly developed into full thickness sloughing of approximately 95% total body surface area. Several skin punch biopsies ruled-out Stevens-Johnson syndrome and toxic epidermal necrolysis. He developed a polymicrobial bacteremia with Staphylococcus aureus and Enterococcus faecalis on hospital day five. His condition worsened with ensuing hypothermia and eventual respiratory failure requiring intubation. He developed septic shock, multi system organ failure, Clostridium difficile colitis, and subsequent acute respiratory distress syndrome (ARDS). Management of his complex full thickness wounds in congruence with his overwhelming sepsis and ARDS presented a novel challenge. LCH is a group of idiopathic disorders characterized by clonal accumulation and proliferation of bone marrow derived dendritic cells (Langerhans cells). It is predominantly a disease of infants and children but cases have been reported in adults. Recurrence of LCH is relatively common and mortality is most often seen in multisystem disease with pulmonary involvement. The disease is classified into three groups, unifocal, multifocal unisystem, and multifocal multisystem. There are approximately 1200 cases in the United States annually and, as such, research is lacking. A unique treatment strategy employing Imatinib (Gleevec) as well as supportive intensive care and ARDS management was utilized. Simultaneously, he required aggressive management of his near total body surface wounds. Ultimately his skin wounds re-epithelialized with improvement in his critical illness, adequate nutritional support, and Imatinib therapy for the primary disease.

Title: Autism spectrum disorder in a term birth neonatal intensive care unit population

Citation: Pediatric Neurology, December 2014, vol./is. 51/6(776-780), 0887-8994;1873-5150 (01 Dec 2014)

Author(s): Winkler-Schwartz A., Garfinkle J., Shevell M.I.

Abstract: BACKGROUND: Nonspecific perinatal risk factors have been revealed to be associated with the development of autism spectrum disorder. However, term at-risk infants, as a distinct population, are underrepresented in the literature. This study examines the incidence and neonatal risk factors for autism spectrum disorder in term neonatal intensive care unit survivors.

Title: Vitamin D deficiency in pediatric critical illness

Citation: Journal of Clinical and Translational Endocrinology, December 2014, vol./is. 1/4(170-175), 2214-6237 (01 Dec 2014)

Author(s): Hebbar K.B., Wittkamp M., Alvarez J.A., McCracken C.E., Tangpricha V.

Abstract: Introduction The potential role for vitamin D in infection has been well described in adults. The objective of our study was to determine the prevalence of vitamin D insufficiency and to evaluate the relationship between vitamin D status and markers of innate immunity and infection in critically ill children. Hypothesis Vitamin D deficiency is highly prevalent in children with critical illness and correlates with the severity of illness and dysfunction in innate immunity.

Title: Three-tier hierarchy and better training advised for childrens critical care.

Citation: Nursing Children & Young People, 01 December 2014, vol./is. 26/10(7-), 20462336

Title: A safety evaluation of aripiprazole for treating schizophrenia during pregnancy and puerperium

Citation: Expert Opinion on Drug Safety, December 2014, vol./is. 13/12(1733-1742), 1474-0338;1744-764X

Author(s): Gentile S.

Abstract: Introduction: Aripiprazole (ARI) is a second-generation antipsychotic acting as a dopamine-serotonin system stabilizer and partial agonist at D2 receptors. The drug is indicated in several and severe psychiatric disorders which are particularly frequent in women during the childbearing age. Area covered: A systematic review of studies investigating the reproductive safety of ARI. Expert opinion: For first trimester use, reviewed data provide no clear evidence about the safety of the drug for the developing fetus. However, a decline of plasma levels (PLs) throughout the pregnancy compared with PLs before pregnancy was observed. This finding
suggests the need to increase the dosage during pregnancy in order to maintain stable PLs. If used during late pregnancy, some signals exist suggesting that ARI may worsen neonatal outcomes. Hence, clinicians should consider withdrawing the drug before the last month of pregnancy to reduce the risks of neonatal complications. However, such risks must be weighed against the risks of woman's symptom deterioration. In any case, parturition should happen in hospitals equipped with well-organized neonatal intensive care units. No information is available on the impact of antenatal exposure to ARI on the main neurodevelopmental milestones. Infant exposure to the drug through maternal milk may increase the risk of insufficient milk production and neonatal somnolence.

Title: Frequency of dosage prescribing medication errors associated with manual prescriptions for very preterm infants

Citation: Journal of Clinical Pharmacy and Therapeutics, December 2014, vol./is. 39/6(637-641), 0269-

Author(s): Horri J., Cransac A., Quantin C., Abrahamowicz M., Ferdynus C., Sgro C., Robillard P.-Y.,
Language: English

Abstract: What is known and objective: The risk of dosage Prescription Medication Error (PME) among manually written prescriptions within 'mixed' prescribing system (computerized physician order entry (CPOE) + manual prescriptions) has not been previously assessed in neonatology. This study aimed to evaluate the rate of dosage PME related to manual prescriptions in the high-risk population of very preterm infants (GA < 33 weeks) in a mixed prescription system.

Title: Uterine artery Doppler in high-risk pregnancies at 23-24 gestational weeks is of value in predicting adverse outcome of pregnancy and selecting cases for more intense surveillance

Citation: Acta Obstetricia et Gynecologica Scandinavica, December 2014, vol./is. 93/12(1276-1281), 0001-

Author(s): Li N., Ghosh G., Gudmundsson S.

Abstract: Objective To assess the role of the placental arterial Doppler examination at 23-24 gestational weeks for predicting adverse perinatal outcome in high-risk pregnancies. Design Retrospective register study. Setting Skane University Hospital in Malmo.Population Six hundred and forty-five women with high-risk pregnancies, without fetal malformations or chromosomal abnormalities.

Title: Toxic shock syndrome surveillance in UK children

Citation: Archives of Disease in Childhood, December 2014, vol./is. 99/12(1078-1082), 0003-9888;1468-2044

Author(s): Adalat S., Dawson T., Hackett S.J., Clark J.E.

Abstract: Background Toxic shock syndrome (TSS) is an acute toxin-mediated illness caused by toxin-producing strains of Staphylococcus aureus and Streptococcus pyogenes. There is no recent data regarding incidence, management and mortality of TSS in UK children.

Title: Cell-based therapies for the preterm infant

Citation: Cytotherapy, December 2014, vol./is. 16/12(1614-1628), 1465-3249;1477-2566 (01 Dec 2014)

Author(s): Zhu D., Wallace E.M., Lim R.

Abstract: The severely preterm infant receives a multitude of life-saving interventions, many of which carry risks of serious side effects. Cell therapy is an important and promising arm of regenerative medicine that may address a number of these problems. Most forms of cellular therapy use stem/progenitor cells or stem-like cells, which have the capacity to migrate, engraft and exert anti-inflammatory effects. Although some of these cell-based therapies have made their way to clinical trials in adults, little headway has been made in the neonatal patient group. This review discusses the efficacy of cell therapy in preclinical studies to date and their potential applications to diseases that afflict many prematurely born infants. Specifically, we identify the major hurdles that must be overcome before cell therapies can be safely used in the neonatal intensive care unit.
Title: Acute respiratory distress syndrome in a pregnant woman with systemic lupus erythematosus: A case report

Citation: Lupus, December 2014, vol./is. 23/14(1528-1532), 0961-2033;1477-0962 (20 Dec 2014)

Author(s): Chen Y.-J.A., Tseng J.-J., Yang M.-J., Tsao Y.-P., Lin H.-Y.

Abstract: When the disease activity of systemic lupus erythematosus (SLE) is controlled appropriately, a pregnant woman who has lupus is able to carry safely to term and deliver a healthy infant. While the physiology of a healthy pregnancy itself influences ventilatory function, acute pulmonary distress may decrease oxygenation and influence both mother and fetus. Though respiratory failure in pregnancy is relatively rare, it remains one of the leading conditions requiring intensive care unit admission in pregnancy and carries a high risk of maternal and fetal morbidity and mortality, not to mention the complexity caused by lupus flare. We report a case of SLE complicated with lupus pneumonitis and followed by acute respiratory distress during pregnancy. Though there is a high risk of maternal and fetal morbidity and mortality, maternal respiratory function improved after cesarean section and treatment of the underlying causes. The newborn had an extremely low birth weight but was well at discharge.

Title: Prognostic values of a combination of intervals between respiratory illness and onset of neurological symptoms and elevated serum IgM titers in Mycoplasma pneumoniae encephalopathy

Citation: Journal of Microbiology, Immunology and Infection, December 2014, vol./is. 47/6(497-502), 1684-1690

Author(s): Hu C.-F., Wang C.-C., Chen S.-J., Perng C.-L., Yang H.-Y., Fan H.-C.

Abstract: Background/Purpose: To retrospectively analyze the clinical manifestations of Mycoplasma pneumoniae (. M. pneumoniae)-associated encephalopathy in pediatric patients.

Title: Motor development and sensory processing: A comparative study between preterm and term infants

Citation: Research in Developmental Disabilities, January 2015, vol./is. 36/(102-107), 0891-4222;1873-3379

Author(s): Cabral T.I., da Silva L.G.P., Tudella E., Simoes Martinez C.M.

Abstract: Infants born preterm and/or with low birth weight may present a clinical condition of organic instability and usually face a long period of hospitalization in the Neonatal Intensive Care Units, being exposed to biopsychosocial risk factors to their development due to decreased spontaneous movement and excessive sensory stimuli. This study assumes that there are relationships between the integration of sensory information of preterm infants, motor development and their subsequent effects. Objective: To evaluate the sensory processing and motor development in preterm infants aged 4-6 months and compare performance data with their peers born at term

Title: Early-infant diagnostic predictors of the neuro-behavioral development after neonatal care

Citation: Behavioural Brain Research, January 2015, vol./is. 276/(143-150), 0166-4328;1872-7549 (January 01,

Author(s): Koshiba M., Kakei H., Honda M., Karino G., Niitsu M., Miyaji T., Kishino H., Nakamura S.,

Abstract: Multidimensional diagnosis plays a central role in infant developmental care, which leads to the prediction of future disabilities. Information consolidated from objective and subjective, early and late, central and peripheral data may reveal neuro-pathological mechanisms and realize earlier and more precise preventive intervention. In the current study, we retrospectively searched correlating factors to the following neurological and behavioral development of 'Head Control' and 'Roll Over' using multivariate correlation analysis of different diagnostic domains over age, subject/object information of the patients who were previously admitted in our neonatal intensive care unit (NICU) and could be developmentally followed up in our outpatient clinic. Based on the hematologic and biochemical data, MRI brain anatomy during NICU hospitalization, we characterized all the acquired data distribution from 31 infants with either 'appeared neurologically normal (ANN, n= 21)' or 'appeared neurologically abnormal (ANA, n = 10)' pro tempore, with a physician's clinical judgment before
discharge. Besides single factor comparisons between ANN and ANA, we examined their development difference by using the multidimensional information processing, principal component analysis (PCA). The diagnostic predictors of neuro-behavioral development were selected by regression analysis with variable selection. It resulted that hematological and brain anatomical factors seemed correlated to both 'Head Control' and 'Roll Over'. This report suggested certain possibility of the cross-domain translational approach between subjective and objective developmental information through multivariate analyses, with candidate markers preliminarily to be evaluated in further studies.

Title: Motor development and sensory processing: A comparative study between preterm and term infants

Citation: Research in Developmental Disabilities, January 2015, vol./is. 36/(102-107), 0891-4222;1873-3379

Author(s): Cabral T.I., da Silva L.G.P., Tudella E., Simoes Martinez C.M.

Abstract: Infants born preterm and/or with low birth weight may present a clinical condition of organic instability and usually face a long period of hospitalization in the Neonatal Intensive Care Units, being exposed to biopsychosocial risk factors to their development due to decreased spontaneous movement and excessive sensory stimuli. This study assumes that there are relationships between the integration of sensory information of preterm infants, motor development and their subsequent effects. Objective: To evaluate the sensory processing and motor development in preterm infants aged 4-6 months and compare performance data with their peers born at term.

Title: Post-traumatic stress disorder in parents of children hospitalized in the neonatal intensive care unit (NICU): medical and demographic risk factors.

Citation: Psychiatry Danubina, December 2014, vol./is. 26/4(347-52), 0353-5053;0353-5053 (2014 Dec)

Author(s): Aftyka A, Rybojad B, Rozalska-Walaszek I, Rzonca P, Humeniuk E

Abstract: BACKGROUND: Post-traumatic stress disorder (PTSD) among parents of neonates hospitalized in the Neonatal Intensive Care Units (NICU) stays an underestimated problem. We determined the incidence of PTSD in parents and pointed out medical and demographic risk factors for PTSD in neonates hospitalized in the NICU

Title: Shared Decision-Making in Pediatric Intensive Care Units: A Qualitative Study with Physicians, Nurses and Parents

Citation: Indian Journal of Pediatrics, December 2014, vol./is. 81/12(1287-1292), 0019-5456;0973-7693 (04 Dec 2014)

Author(s): Kahveci R., Ayhan D., Doner P., Cihan F.G., Koc E.M.

Abstract: Objectives: To understand how decisions are made in Intensive Care Unit (ICU) settings where critically-ill children require life-support decisions and what are the perceptions of health professionals and parents.

Title: Comparison of Two New Generation Pulse Oximeters with Arterial Oxygen Saturation in Critically Ill Children

Citation: Indian Journal of Pediatrics, December 2014, vol./is. 81/12(1297-1301), 0019-5456;0973-7693 (04

Author(s): Jose B., Lodha R., Kabra S.K.

Abstract: Objectives: To compare the performance of two new generation pulse oximeters, one with enhanced signal extraction technology (SET) and other without enhanced SET in detecting hypoxemia and to correlate it with arterial blood gas analysis.

Title: Decision Making for Life Sustaining Therapies in Pediatric Intensive Care: Who Should Decide?

Citation: Indian Journal of Pediatrics, December 2014, vol./is. 81/12(1283-1284), 0019-5456;0973-7693 (04
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