PULSUS

WWW.PULSUS.COM

14th World Pediatrics & Neonatal Healthcare Conference

September 11-12, 2017   Los Angeles, USA

Scientific Tracks & Abstracts
Day 1

Sessions

General Pediatrics | Neonatology | Pediatric Critical Care & Nursing | Pediatric Nutrition | Pediatric Trauma & Depression | Pediatric Endocrinology

Session Chair
Jane L Holl
Northwestern University and Focus Pointe Global, Inc., USA

Session Co-chair
Kai Jiao
University of Alabama at Birmingham, USA

Session Introduction

Title: **Common bacterial infections among children**

Rania Abdelmonem Khattab, Cairo University, Egypt

Title: **Group success with the picky eater: Inter-professional parent group versus individual OT treatment**

Carrie Owen, Children's Hospital of Eastern Ontario, Canada

Title: **Somatization and PTSD in child sexual abuse**

Seung Min Bae, Gachon University Gil Medical Center, South Korea

Title: **Predictors of outcome of intensive care in acutely ill children**

Hanaa I Rady, Cairo University, Egypt

Title: **Effect of feeding schedule on time to reach full feeds in neonates weighing 500 to 1500 grams: A randomized trial**

Showkat Hussain Tali , AIMSR, India

Title: **Can MCA Doppler studies predict mortality in fetuses with congenital hydrocephalus?**

Bahauddin Ibraheem Sallout, Women's Specialized Hospital- King Fahad Medical City, Saudi Arabia

Pediatrics & Neonatal Healthcare 2017

Common bacterial infections among children

Rania Abdelmonem Khattab
Cairo University, Egypt

Bacteria are tiny, microscopic, unicellular organisms. The most common bacterial infections among children are skin infections, ear infections, bronchiolitis, pinkeye (conjunctivitis), common cold and throat infections. Urine infection is common in children. It can cause various symptoms. A course of antibiotics will usually clear the infection rapidly. In most cases, a child with a urine infection will make a complete recovery. Certain children are at particular risk of bacterial infections. These children include: infants younger than 3 months, children who have no spleen or who have an immune system disorder and children who have cancer. Sometimes doctors diagnose bacterial infections by the typical symptoms they cause. Bacteria are identified in samples of tissue, blood, or body fluids, such as urine, pus, or cerebrospinal fluid. Bacteria from these samples can be identified under microscope, by culture or with a rapid identification test. Many bacterial infections in children can be prevented by vaccination. Viral infections such as measles, polio, and hepatitis A and B can also be prevented with routine immunization. Sometimes antibiotics alone can eliminate a bacterial infection. However, when an infection has created a large collection of pus, people sometimes also need surgery to drain the pus. Such infections include abscesses and joint infections. Infections spread among children by direct contact, indirect contact, droplets transmission and airborne spread. There are several ways to protect the child; by washing hands, using antibacterial hand sanitizers, cover his or her mouth when coughing or sneezing and clean open cuts.

Biography

Rania Abdelmonem Khattab has completed her PhD in 2012 from Faculty of Pharmacy, Microbiology and Immunology Department, Cairo University, Egypt. She has got Cairo University International Publication Award, Egypt in 2013, 2016 and 2017. She has many teaching experiences for both undergraduate and postgraduate courses e.g. basic microbiology and immunology, pharmaceutical microbiology, quality control of herbal drugs, public health and biotechnology. She has attended many workshops and some conferences with poster presentation in the Global Biotechnology Congress, Boston, MA, USA in June 2014 and 3rd Global Microbiologists Annual Meeting, Portland, Oregon, USA, 15-17 August 2016. She has given oral presentation in Clinical Trials Conference, Orlando, Florida, July, 2015. She has published many papers in international journals.

rania.khatab@pharma.cu.edu.eg

Notes:

Pediatrics & Neonatal Healthcare 2017

Group success with the picky eater: Inter-professional parent group versus individual OT treatment

Carrie Owen
Children's Hospital of Eastern Ontario, Canada

Background: Feeding difficulties are common in young children and have been estimated to occur in 25-35% of typically developing children. The waitlist for occupational therapy feeding services has increased for numerous reasons including the new diagnostic category, avoidant/restrictive food intake disorder. To manage the waitlist, inter-professional feeding groups were offered. Although an inter-professional approach is recommended, the literature contains few systematic descriptions. In 2012, the Children's Hospital of Eastern Ontario (CHEO) completed its program evaluation of this group approach and determined that it was an effective modality for children with feeding challenges. However, parents' perceptions of this new approach are not well documented. The purpose of this study was to acquire early insight into parents' perceptions of an inter-professional group (IG) service delivery model and an individual one-on-one (ONO) approach.

Methodology: Participant eligibility was determined through referrals to occupational therapy for feeding challenges. 40 participants, (n=20 per group), were recruited using convenience sampling. Assignment was through simple randomization. The measuring process of care (MPOC)-20 was used to assess parents' perceptions of healthcare professionals' behavior.

Findings: The IG scored high across all five constructs (mean range 5.1-5.9). Two significant constructs, coordinated and comprehensive Care and respectful and supportive care have means of 5.76 and 5.9 respectively. The scores across all constructs and between groups could be ranked identically. Children in both groups acquired adequate feeding skill levels. Wait times were lowered by 71%. The IG children required fewer follow-up visits than the ONO children. Results offer further evidence that an inter-professional-lead group program can provide care that brings the parents satisfaction. The authors agree that the value provided by the IG is in-line with patient and healthcare expectations.

Biography

Carrie Owen is a Registered Occupational Therapist and Lactation Consultant specializing in infants, toddlers, young children, and teens with feeding challenges. She has provided expert advice and guidance to parents on subjects including development, feeding, and sensory processing. She is the Creator and Coordinator of the Inter-professional Feeding Groups for children between the ages of 5 months and 14 years at the Children's Hospital of Eastern Ontario. She is presently studying the effectiveness of the feeding group for children between 4 and 12 years of age. She was the Principle Author on a manuscript published in Nutrition in Clinical Practice and has also published in Today's Parent magazine. Presently, she is working both at the Children's Hospital of Eastern Ontario and in private practice. Her teaching experience includes the University of Ottawa, the University of Toronto and York University.

cowen@cheo.on.ca

Notes:

Pediatrics & Neonatal Healthcare 2017

Somatization and PTSD in child sexual abuse

Seung Min Bae

Gachon University Gil Medical Center, South Korea

Purpose: Somatization is a major post-traumatic symptom in the sexually abused children. The aims of this study were 1) to find the relation between somatizations and post-traumatic stress disorder (PTSD) symptoms in child sexually abused victims and 2) to elucidate whether type of abuse have effect on somatization.

Methods: Sixty-three victims were evaluated of their somatizations (Child behavioral checklist), PTSD symptoms (trauma symptom checklist for children, TSCC), and level of intelligence. The correlation and regression analyses were calculated to predict somatization based on the PTSD symptom, intelligence score, age, and the type of sexual abuse.

Results: The result showed that factors associated with somatization in the sexual abuse victims were PTSD symptoms (B=0.356, p=0.001) and intelligence (B=0.179, p=0.019). The type of abuse by itself did not correlate somatization (B=3.027, p=0.310), but had moderating effect of PTSD symptoms on somatization (Type of abuse PTSD symptoms, B=-.489, p=0.036). PTSD symptoms were associated with somatization only in victims with the molestation type of abuse.

Conclusions: Somatization of the sexually abused victims was influenced by the severity of PTSD symptoms and intelligence. The effect of the PTSD symptoms on somatization was mediated by the type of abuse. The rape type of abuse might be a powerful predisposing factor which attenuates the effect of post-traumatic symptoms on somatization.

Biography

Seung Min Bae completed a Psychiatric Training and Child Psychiatry Fellowship at Kangbuk Samsung Hospital. Since 2009, she has been a Psychiatric Assistant Professor at Gachon University and Director of Incheon Sunflower Center for Sexually Abused Children and is currently the Head of the Support Center for victims of crime in the ministry of justice. She is a non-standing Director of the Korea Women's Development Agency under the Ministry of Gender Equality and Family.

manitch@hanmail.net

Notes:

Pediatrics & Neonatal Healthcare 2017

Predictors of outcome of intensive care in acutely ill children

Hanaa I Rady
Cairo University, Egypt

Background: Intensive care units (ICU) are always nearly full capacity which makes admission very difficult and may affect patient's outcome at times of shortage.

Aim: To identify the variables capable of predicting which patient will benefit most from ICU admission, therefore prioritizing those patients when there is shortage of ICU beds.

Methodology: Two-hundred and fifty cases were subjected to thorough history taking, meticulous clinical examination, laboratory and radiological investigations when needed.

Results: ICU admissions occurred within 24 hours of coming to the emergency room (ER) in 63.6% of cases and after 24 hours in 22.4% of cases. Mortality rate was 37.6%. Survival was better among early than late (>24hrs) ICU admissions (p=0.05). Worst outcome was associated with pre-admission cardiac arrest (p<0.001), need for pre-admission intubation (p<0.001), high initial total inotropic dose (p<0.001) and thrombocytopenia (p<0.001).

Conclusion: Early ICU admission when indicated is associated with a better outcome. Pre-admission assessment can help prioritize those who would benefit from ICU. Not all cases referred to the ICU needed an intensive care, and most of them improved when received early care in the general ward.

Biography

Hanaa I Rady is working as an Associate Professor of Pediatrics and Pediatric Intensive Care, and is the Deputy Director of Children University Pediatric Hospital, AbolRish, Cairo University She is the Director of PICU of the 7th floor (21 beds). She has completed her MSc and MD from Cairo University in the year 2005 and 2008 respectively. She has published over 18 publications in reputed journals.

hanaaarady@gmail.com

Notes:

Pediatrics & Neonatal Healthcare 2017

Effect of feeding schedule on time to reach full feeds in neonates weighing 500 to 1500 grams: A randomized trial

Showkat Hussain Tali
AIMSR, India

Aim: To compare the effect of 3-hourly (3-h) versus 2-hourly (2-h) feeding schedules on time to reach full feeds in neonates weighing less than 1500 grams

Materials & Methods: This was a randomized trial conducted in a level 3 neonatal intensive care unit, Surya Children's Hospital Mumbai, India. We enrolled 120 preterm neonates with birth weights of 501 to 1500 g. The neonates were divided into 2 strata based on birth weight: 501 to 1000 g and 1001 to 1500 g. The neonates were randomized into 2 orogastric feeding schedules: 8 or 12 feeds (3-h or 2-h schedules, depending upon randomization), and a uniform feeding protocol was followed. Analysis was performed using the intention-to-treat principle. Categorical variables were compared using the Chi-square test. Continuous measures between groups were compared using 2-sample t test or Mann Whitney U test as appropriate. Data were analyzed using IBM SPSS version 21 software. $P < 0.05$ was considered significant.

Primary Outcome measures were time (in days) to reach full feeds (defined as tolerance of 150 mL/kg/d of feeds for at least 48 h).

Secondary Outcome measures were time (in days) to attain birth weight; time (in days) to discharge; weight, length, and head circumference at discharge; incidence of feed intolerance, necrotizing enterocolitis (NEC), intravascular hemorrhage (IVH), screen-positive sepsis, culture-positive sepsis, hypoglycemia, apnea, jaundice and retinopathy of prematurity (ROP), duration of total parental nutrition (TPN) and nursing; and mortality.

Results: A total of 215 neonates were assessed for eligibility, of which 95 were excluded. Hence, 120 neonates were enrolled in the trial. There was no significant difference in time (in days) to reach full feeds in the 2-h versus 3-h groups (9.53 ± 4.26 vs. 9.85 ± 5.48; $P = 0.73$). There was no significant difference between the 2 groups in any of the secondary outcomes. The total time spent per day in feeding was significantly lesser in the 3-h feeding schedule groups ($P = 0.04$).

Subgroup Analysis revealed that among the neonates in the lower birth weight strata (501 to 1000 g), those fed 2 hourly reached full feeds earlier compared with those fed 3-hourly (2-h group: 11.24 ± 2.88 d vs. 3-h group: 14.14 ± 4.98 d; $P = .041$).

Conclusions: There was no significant difference in time to reach full feeds in all the neonates, irrespective of whether they were fed 2-h or 3-h. However, neonates < 1000 g reached full feeds earlier when fed more frequently (2-h feeding schedule).

Biography

Showkat Hussain Tali is working as an Assistant Professor of Pediatrics, Adesh University. After obtaining his Bachelor's Degree in 2005, he obtained his MD in Pediatric Medicine from University of Kashmir in 2010. In 2013 he joined Department of Neonatology Surya Children's Hospital Mumbai and became Board Certified in Neonatology from the National Board of India in 2016. In the same year he joined Adesh University as Assistant Professor Pediatrics and In-charge Neonatology. He has more than a dozen publications in national and international journals. He has received science talent search award from the Govt. of Jammu and Kashmir in 1997. He is also keenly interested in poetry and creative writing and has been awarded by Help Foundation and Rajiv Gandhi foundation, India, for excellence in creative writing in 2007.

drshowkatshifa@gmail.com

Pediatrics & Neonatal Healthcare 2017

Can MCA Doppler studies predict mortality in fetuses with congenital hydrocephalus?

Bahauddin Ibraheem Sallout

Women's Specialized Hospital- King Fahad Medical City, Saudi Arabia

Objective: The objective of this study is to investigate the impact of abnormal middle cerebral artery (MCA) Doppler on the perinatal mortality in fetuses with congenital hydrocephalus (CH).

Methods: A prospective study of all fetuses with CH who delivered at our hospital over a period of 7 years. Data were obtained from the ultrasound, labor room and intensive neonatal care unit (NICU) database. The Perinatal mortality rates were evaluated in relation to the following measures, associated congenital anomalies, cortical mantle thickness (CMT), and MCA Doppler abnormalities (absent or reversed diastole). The main outcome measure was perinatal mortality rate in relation to MCA Doppler changes.

Results: A total of 85 cases of CH were diagnosed and managed. The birth prevalence of CH was 2.44 per 1000 live births. On one hand, the perinatal mortality rate was higher in those fetuses with non-isolated hydrocephalus, (37.25% (19/51) versus (35.29% (12/34), p¼0.854 and in those cases with CMT <10 mm, 38.78% (19/49) versus 33.33% (12/36) in those with CMT >10 mm, p¼0.607. On the other hand, the perinatal mortality rate was significantly higher in those fetuses with abnormal MCA Doppler, (100% (13/13) versus 25% (18/72), OR¼78.0, 95% CI (5.52–44085124.60), p<0.001.

Conclusions: Abnormal fetal MCA Doppler (absent or reversed diastole) appears to be a poor prognostic indicator with significantly high perinatal mortality in fetuses with CH.

Biography

Dr. Sallout is a certified Maternal-Fetal Medicine (MFM) consultant from university of Ottawa, Canada, with American Specialty in Ultrasound in Obstetrics and Gynecology. He has special training in fetal echocardiograph and 3D/4D sonography. He developed the ultrasound Unit and established the MFM department, and currently, the Medical Director for the Women's Specialized Hospital, King Fahad Medical City. Riyadh, Saudi Arabia. He has 17 publications in the field of obstetrics ultrasound and fetal medicine, and he participated and presented in many international and local conferences.
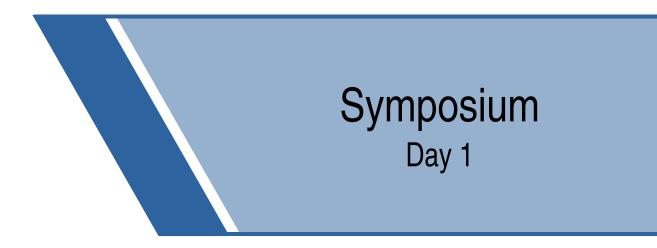
bsallout@kfmc.med.sa

Notes:

PULSUS
WWW.PULSUS.COM

14th World Pediatrics & Neonatal Healthcare Conference

September 11-12, 2017   Los Angeles, USA

Symposium
Day 1

Pediatrics & Neonatal Healthcare 2017

Hamza Abbasi

Unterberg Children's Hospital at Monmouth Medical Center, USA

Efficacy of standardized feeding protocol for preterm infants

Although it is universally accepted that infants who are delivered prematurely require nutritional support to survive, the published evidence lacks clear indications of the best method of delivery, substrate use, timing or appropriate outcome measures to evaluate nutritional support. In the absence of published or widely accepted guidelines regarding nutritional support strategies for preterm infants, most institutions have developed their own guidelines for nutrition management and nutrition practices vary widely. We planned to assess the efficacy of a newly introduced standardized feeding protocol for preterm infants (<1800 g) in our hospital. These groups were stratified into 3 categories based on weight (i.e. <1000 g, 1000-1500 g and >1500 g). We calculated the number of days to regain birth weight and the number of days on TPN in both the groups to assess if there was any statistically significant difference between the pre-intervention and post intervention group. There was no statistically significant difference in the number of days to regain birth weight in any of the groups, and in the number of days on TPN noted in the <1000 g and >1500 g weight categories between the pre-intervention and the post- intervention group. However, there was a statistically significant difference ($p<0.05$) in the number of days on TPN in the 1000 g-1500 g weight category between the pre-intervention and the post- intervention groups. With this study, we can state that the implementation of a standardized feeding protocol in the NICU is efficient in terms of decreasing the number of days on TPN in preterm infants between 1000g and 1500 g.
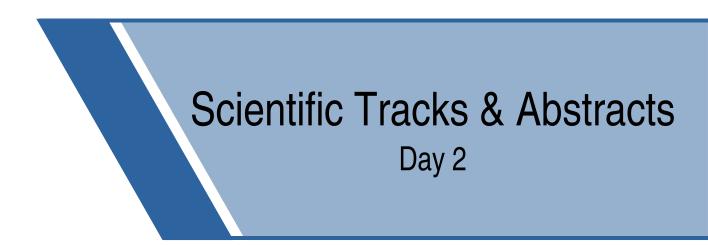
Biography

Hamza Abbasi is a third-year Pediatric Resident at The Unterberg Children's Hospital at Monmouth Medical Center. He has completed his MBBS from Alfaisal University School of Medicine in Riyadh, Saudi Arabia in 2014. He has been involved in multiple clinical research projects since 2011 and plans on continuing to play a role in optimizing health care via research in the future throughout his career as a Primary pediatrician.

hamzabbasi.89@gmail.com

Notes:

PULSUS
WWW.PULSUS.COM

14th World Pediatrics & Neonatal Healthcare Conference

September 11-12, 2017   Los Angeles, USA

Scientific Tracks & Abstracts
Day 2

Sessions

General Pediatrics | Pediatric Oncology and Haematology | Neonatology |
Pediatric Allergy & Infectious Diseases | Pediatric Endocrinology | Pediatric
Cardiology | Pediatric Gastroenterology

Session Chair
Shoshana Dayanim
Keiser University, USA

Session Co-chair
Showkat Hussain Tali
AIMSR, India

Session Introduction

Title: **Prevalence of hypothyroidism in pediatric thalassemia in Dr. Soetomo Hospital Surabaya**

Nur Rochmah, Airlangga University, Indonesia

Title: **Gastroschisis: Improving the survival rate by implementing aseptic techniques**

Kagiso Batka-Makwinja, University of Pretoria, South Africa

Title: **Prevalence of major congenital anomalies at King Fahad Medical City in Saudi Arabia: A tertiary care centre based study**

Bahauddin Ibraheem Sallout, Women's Specialized Hospital- King Fahad Medical City, Saudi Arabia

Title: **The profile of anti-glutamic acid decarboxylase autoantibodies in type 1 diabetes mellitus children in Dr. Soetomo Hospital Surabaya**

Muhammad Faizi, Airlangga University- Dr. Soetomo Hospital Surabaya, Indonesia

Title: **The application of lung ultrasound in the diagnosis and antidiastole of neonatal lung diseases: The experience from China**

Jing Liu, Chaoyang District Maternal and Child Health Care Hospital, China

Title: **Intestinal parasitosis in relation to CD4+ T cells levels and anemia among HAART initiated and HAART naive pediatric HIV patients in model ART center, Addis Ababa, Ethiopia**

Hylemariam Mihiretie, Wollega University, Ethiopia

Pediatrics & Neonatal Healthcare 2017

Prevalence of hypothyroidism in pediatric thalassemia in Dr. Soetomo Hospital Surabaya

Nur Rochmah, Indah Ratna Sari, Laili Mufidah, Irwina Rahma Andriani, Andi Cahyadi, Maria C Shanty Larasati, Mia Ratwita Andarsini, Muhammad Faizi, IDG Ugrasena and **Bambang Permono**
Airlangga University, Indonesia

Background: Hypothyroidism is the common endocrine complications in thalassemia patients, caused by iron overload and iron depotition in thyroid gland. Early recognition and prevention may improve the quality of life. Thyroid dysfunction usually occured after 10 year in transfusion dependent thalassemia, unfortunately hypothyroidism is not clinically observed.

Objective: To determine the prevalence of hypothyroidsm pediatric thalassemia patients in Dr. Soetomo Hospital Surabaya

Methods: This cross sectional study evaluated children aged 3-18 years old with thalassemia at hematology-oncology outpatient clinic, Dr. Soetomo Hospital from February to March 2017. Inclusion criterias were: patients had regular transfusions more than one year. Clinical manifestations and biochemical analysis were taken. Subclinical hypothyroidism was defined as normal FT4 with high TSH; central hypothyroid: low FT4 and low to normal TSH; overt primary hypothyroidism: low FT4 and high TSH. Patients with hypothyroidsm were divided into 2 group, group 1($<$11yo), and group 2($\geq$11yo).

Result: 106 patients were included in the study. 56 were male, mean age was 10.66 years. Moderate malnutrition was obsereved in 29.3%; mean of ferritin level was 3703.82±335.69; mean of age of start transfusion was 6.16. Mean of pre-transfusion hemoglobin level was 5.14±1.2. Impaired thyroid function were observed in 27 (25.2%) out of 106 patients: 12 (12.1%) patients subclinical hypothyroidism; 13 (13.1%) patients central hypothyroid, and 2 (2.0%) patients overt primary hypothyroidism. Comparison between group 1 and group 2 was significant (p$<$0.001).

Conclusion: Hypothyroidism is more prevalent in aged 11 year old and more. Thyroid function should be followed periodically.

Biography

Nur Rochmah is working as a Lecturer of Department of Pediatrics, Faculty of Medicine, Airlangga University, Dr Soetomo Hospital. Surabaya. East Java. Indonesia.

drnurrochmah@gmail.com

Notes:

Pediatrics & Neonatal Healthcare 2017

Gastroschisis: Improving the survival rate by implementing aseptic techniques

Kagiso Batka-Makwinja
University of Pretoria, South Africa

Gastroschisis has been used as the bellwether condition for assessing an institution's capacity to deliver newborn surgical care. Therefore evaluating the treatment and outcomes of gastroschisis neonates is of importance to any unit offering neonatal surgical care. These neonates are particularly susceptible to sepsis, and mortality due to sepsis. The survival rate in developed countries has increased to 90%, but in developing countries may be as low as 20%.

This prospective study was aimed at determining whether implementation of and adherence to aseptic interventions could improve the survival rate of gastroschisis neonates, in this high prevalence region. The interventions included, written policies prioritising and re-enforcing hand washing and a 'bare-below-elbows' approach, establishing compliance to uniform blood culture taking techniques, using new Silo-bags for staged abdominal closures, and insertion and maintenance of central lines according to standardised protocols. Video material and physical demonstrations were used to demonstrate the techniques described in the above protocols. The World Health Organization's (WHO) Hand Hygiene Self-Assessment Framework was used and this is a systematic tool to obtain situational analysis of hand hygiene promotion and practices in a specific unit. The survival rate of gastroschisis neonates increased to 67% from 40% after implementation and adherence to aseptic techniques and interventions. Compliance to aseptic protocols increased by 43%. Observations demonstrated a decrease in the rate of blood culture contamination rate. These findings may be utilised to drive initiatives and strategies to improve implementation policies at any level or setting of healthcare services.

Biography

Kagiso Batka-Makwinja is a qualified medical doctor doing her fellowship specialization in Pediatric Surgery at the University of Pretoria. She serves in the executive committees of the South African Pediatric Surgical Trainees Association, the South African Society of Surgeons in Training and the International Pediatric Endoscopic Group. Dr Batka-Makwinja has presented topics globally: 'Infant Feeding in HIV Positive Mothers' in Barcelona, Spain; 'HIV Treatment Compliance' in Fortaleza, Brazil; Pediatric Laparoscopic Ovary-sparing Surgery in Benign Ovarian Neoplasms' in Kwazulu-Natal and 'Pediatric Laparoscopic Appendectomies' in Cape Town, South Africa. Kagiso Batka-Makwinja lives in Gauteng, South Africa.

kagisobatka@gmail.com

Notes:

Pediatrics & Neonatal Healthcare 2017

Prevalence of major congenital anomalies at King Fahad Medical City in Saudi Arabia: A tertiary care centre based study

Bahauddin Ibraheem Sallout
Women's Specialized Hospital- King Fahad Medical City, Riyadh, Saudi Arabia

The prevalence of major congenital anomalies in Saudi Arabia is a largely understudied area. Knowing the prevalence of birth defects and their trends is important in identifying potential factors that are either causative or preventative. Early antenatal diagnosis of major congenital anomalies is important for possible termination of pregnancy, fetal or neonatal. We determined the prevalence of major congenital anomalies in our hospital population since implementation of an improved screening system. This single-centre prospective cross-sectional study was conducted in a tertiary care hospital in Riyadh. A total of 63,452 obstetrical ultrasound examinations were performed for 30,632 female Saudi obstetric patients from the period of January 2007 to December 2012. A total of 1,598 fetuses were diagnosed with major congenital anomalies, including 1,064 (66.6%) fetuses with isolated major anomalies and 534 (33.4%) fetuses with non-isolated major anomalies. The antenatal prevalence of congenital anomalies was 52.1 per 1000 pregnancies. The median maternal age at diagnosis was 29 years. The median gestational age at diagnosis was 30 weeks of gestation. Two hundred and eighty five cases (17.85%) had a previous family history of similar anomalies. The most commonly diagnosed anomalies involved the genitourinary system (652 cases). The birth prevalence of major congenital anomalies was 46.5 per 1000 live births. The prevalence of major congenital anomalies in our hospital population appears to be higher than international prevalences, with a high recurrence rate. Environmental, nutritional and social factors may be contributing to this phenomenon.

Biography

Dr. Sallout is a certified Maternal-Fetal Medicine (MFM) consultant from university of Ottawa, Canada, with American Specialty in Ultrasound in Obstetrics and Gynecology. He has special training in fetal echocardiograph and 3D/4D sonography. He developed the ultrasound Unit and established the MFM department, and currently, the Medical Director for the Women's Specialized Hospital, King Fahad Medical City. Riyadh, Saudi Arabia. He has 17 publications in the field of obstetrics ultrasound and fetal medicine, and he participated and presented in many international and local conferences.

bsallout@kfmc.med.sa

Notes:

Pediatrics & Neonatal Healthcare 2017

The profile of anti-glutamic acid decarboxylase autoantibodies in type 1 diabetes mellitus children in Dr. Soetomo Hospital Surabaya

Muhammad Faizi, Nur Rochmah, Agus Budiarto and **Priya Arrachman**
Airlangga University- Dr. Soetomo Hospital Surabaya, Indonesia

Background: Mostly, type 1 diabetes mellitus (T1DM) is caused by pancreatic beta cell damage by autoimmune process which leads to reduced insulin production. Autoantibodies related to T1DM are islet-cell antibodies (ICA), insulin autoantibodies (IAA), tyrosine phosphatase autoantibodies (IA-2A) and glutamic acid decarboxylase (GAD). The profile of anti-glutamic acid decarboxylase autoantibodies in type 1 diabetes mellitus children in Dr. Soetomo Hospital Surabaya is still unknown.

Objective: The objective of the study is to determine the profile of anti-glutamic acid decarboxylase autoantibodies in type 1 diabetes mellitus children in Dr. Soetomo Hospital Surabaya.

Methods: This cross sectional study evaluated children with T1DM in Pediatric Endocrinology Outpatient Clinic of Dr. Soetomo Hospital during January-March 2017. We diagnosed T1DM based on consensus of Pediatric Endocrinology Working Group, Indonesian Pediatric Society. The presence of anti-GAD in serum was detected by anti-GAD65 commercial kit. Duration of illness referred to time from T1DM diagnosed until anti-GAD examination.

Results: There were 32 children with T1DM, 50% males. The mean age at diagnosis was 9.75 (SD 2.52, range 4-14) years. The median of duration of illness was 3.5 (range 1-11) years. The anti-GAD was positive in 30 (93.8%).

Conclusions: Anti-GAD test is positive in majority children with T1DM and still persist for long periods since T1DM diagnosed.

Biography

Muhammad Faizi is currently working as Lecturer at the Department of Pediatrics, Faculty of Medicine, Airlangga University- Dr Soetomo Hospital. Surabaya, Indonesia.

dr.fayzi@gmail.com
muhammad_faizi@yahoo.com

Notes:

Pediatrics & Neonatal Healthcare 2017

The application of lung ultrasound in the diagnosis and antidiastole of neonatal lung diseases: The experience from China

Jing Liu[1,2], Jing-Han Chi[2], Ru-Xin Qiu[1], Yue-Qiao Gao[1], Jiu-Ye Guo[2] and Jian-Jun Li[1]
[1]Chaoyang District Maternal and Child Health Care Hospital, China
[2]Bayi Children's Hospital, China

Background: Ultrasound has been used extensively for the diagnosis of lung diseases including in neonatal intensive care unit (NICU). We have developed this technique in NICU for the diagnosis and differential diagnosis of neonatal lung diseases since January, 2011. Till now, a total of 6184 infants were accepted more 20,000 times lung ultrasound examinations. We found that almost all kinds of lung diseases can be diagnosed accurately by lung ultrasound.

Methods: Generally, the diagnoses of lung diseases were based on medical history, clinical manifestation, laboratory examination and the findings of chest radiography (CR) and/or computed tomography (CT). The ultrasonographic features of different lung diseases were compared with above traditional findings.

Results: There were 1597 cases without lung disease and 4587 cases were diagnosed as different lung diseases, including transient tachypnea of newborn (TTN) 1296 cases, respiratory distress syndrome (RDS) 1104 cases, pneumonia 1056 cases, meconium aspiration syndrome (MAS) 429 cases, pulmonary atelectasis 242 cases, pulmonary hemorrhage 107 cases, pneumothorax 86 cases, pulmonary edema 242 cases (who couldn't be included to other diseases), 25 infants were misdiagnosed as atelectasis in fact that they were thymus gland. Different lung disease has different ultrasonographic characteristics, generally, however, the main signs of lung disease on LUS were as following: pleural line abnormalities, absence of A-lines, lung consolidation with air bronchograms, interstitial syndrome, lung sliding disappearance, lung pulse, lung point double-lung point compact B-line dan white lung.

Conclusion: Ultrasound is advantageous in diagnosing neonatal lung diseases because of the following benefits: low cost, easy to learn and operate, non-invasive, harmless to the human body, and suitable for ongoing monitoring. Ultrasound is accurate and reliable and thus has an important value in guiding treatment and can replace X-ray as the preferred imaging method of neonatal lung diseases.

Biography

Jing Liu is the Leader and the Director of the Center of Neonatal Intensive Care Unit, Beijing Chaoyang District Maternal and Child Health Care Hospital and Bayi Children's Hospital Affiliated With the Army General Hospital of the Chinese PLA. His research interest is neonatal critical care, his academic positions includes the Associate Chairman of Committee of PLA Academy of Pediatric, the Associate Chairman of Neonatal Neurologist Committee of Chinese Neonatologist Association and Editorial Member of 20 Chinese or English Journals, etc. He has published over 260 papers as a First Author, 10 Books and Chapters in Books. His research work has been supported by China Natural Science Foundation and China Post-doctoral Science Foundation, etc., and he has won 12 awards for Science and Technology of The Government of China.

Liujingbj@live.cn

Notes:

Pediatrics & Neonatal Healthcare 2017

Intestinal parasitosis in relation to CD4+ T cells levels and anemia among HAART initiated and HAART naive pediatric HIV patients in model ART center, Addis Ababa, Ethiopia

Hylemariam Mihiretie
Wollega University, Ethiopia

Background: Intestinal parasites (IPs) are major concerns in most developing countries where HIV/AIDS cases are concentrated and almost 80% of AIDS patients die of AIDS-related infections. In the absence of highly active antiretroviral therapy (HAART), HIV/AIDS patients in developing countries unfortunately continue to suffer from the consequences of opportunistic and other intestinal parasites. The aim of the study was to determine the prevalence of intestinal parasites in relation to $CD4^+$ T cells levels and anemia among HAART initiated and HAART naïve pediatric HIV patients in a model ART center in Addis Ababa, Ethiopia.

Methods: A prospective comparative cross-sectional study was conducted among HAART initiated and HAART naive pediatric HIV/AIDS patients attending a model ART center at Zewditu Memorial Hospital between August 05, 2013 and November 25, 2013. A total of 180 (79 HAART initiated and 101 HAART naïve) children were included by using consecutive sampling. Stool specimen was collected and processed using direct wet mount, formol-ether concentration and modified Ziehl-Neelsen staining techniques. A structured questionnaire was used to collect data on socio-demographic and associated risk factors. $CD4^+$ T cells and complete blood counts were performed using BD FACSCalibur™ and CELL-DYN 1800, respectively. The data was analyzed by SPSS version 16 software. Logistic regressions were applied to assess any association between explanatory factors and outcome variables. P values <0.05 were taken as statistically significant.

Results: The overall prevalence of IPs was 37.8% where 27.8% of HAART initiated and 45.5% of HAART naive pediatric HIV/AIDS patients were infected (p<0.05). *Cryptosporidium* species, *E. histolytica/dispar*, Hook worm and *Taenia* species were IPs associated with $CD4^+$ T cell counts <350 cells/µL in HAART naive patients. The overall prevalence of anemia was 10% in HAART and 31.7% in non-HAART groups. *Hook worm*, *S. stercoralis* and *H. nana* were helminths significantly associated with anemia in non-HAART patients [AOR, 95% CI: 4.5(1.3, 15.2), P< 0.05]. The prevalence of IPs in non-HAART patients was significantly associated with eating unwashed/raw fruit [AOR, 95% CI: 6.3(1.2, 25.6), P<0.05], open field defecation [AOR, 95% CI: 9.3(1.6, 53.6), P<0.05] and diarrhea [AOR, 95% CI: 5.2(1.3, 21.3), P<0.05]. IPs significantly increased in rural residents [AOR, 95% CI: 0.4(0.1, 0.9, P<0.05)].

Conclusion: The overall prevalence of intestinal parasites significantly differed by HAART status and *cryptosporidium* species were found only in HAART naïve patients with low $CD4^+$ T cell counts. Anemia was also more prevalent and significantly associated with IPs in non-HAART patients. This study identified some environmental and associated risk factors for intestinal parasitic infections. Therefore, Public health measures should continue to emphasize the importance of environmental and personal hygiene to protect HIV/AIDS patients from infections with intestinal parasites and maximize the benefits of HAART.
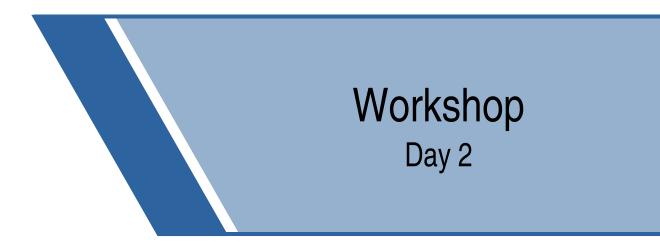
Biography

Dr Hylemariam Mihiretie is currently working in Wollega University, Ethiopia. His research interests are pediatric HIV/AIDS, maternal and neonatal healthcare etc.

hylemariam@gmail.com

PULSUS
WWW.PULSUS.COM

14ᵗʰ World Pediatrics &
Neonatal Healthcare Conference

September 11-12, 2017   Los Angeles, USA

Workshop
Day 2

PULSUS
WWW.PULSUS.COM

Pediatrics & Neonatal Healthcare 2017

Li-Xiao Xu

Children's Hospital of Soochow University, China

Autophagy-regulated AMPAR subunit up-regulation in *in vitro* oxygen glucose deprivation/reoxygenation-induced hippocampal injury

Autophagy has been implicated to mediate experimental cerebral ischemia/reperfusion-induced neuronal death; the underlying molecular mechanisms, though, are poorly understood. In this study, we investigated the role of autophagy in regulating the expression of AMPAR subunits (GluR1, GluR2, and GluR3) in oxygen glucose deprivation/reperfusion (OGD/R)-mediated injury of hippocampal neurons. Our results showed that, OGD/R-induced hippocampal neuron injury was accompanied by accumulation of autophagosomes and autolysosomes in cytoplasm alongside a dramatic increase in expression of autophagy-related genes, LC3 and Beclin 1 and increased intracellular Ca 2+ levels. Pre-treatment with autophagy inhibitor 3-methyladenine (3-MA) significantly reduced this effect. Moreover, the OGD/R-induced up-regulation of mRNA and protein expressions of GluR1, GluR2 and GluR3 were also effectively reversed in cells pretreated with 3-MA. Our findings indicate that OGD/R induced the expression of GluRs by activating autophagy in *in vitro* cultured hippocampal neurons, which could be effectively reversed by the administration of 3-MA.

Biography

Li-Xiao Xu is working as an Assistant Professor of Clinical Research Institute of Soochow University. She got her Doctorate degree in Biochemistry and Molecular Biology at Sun Yat-Sen University in 2012. Since 2012, she has been working in Children's Hospital of Soochow University and focused on the research of brain damage, studies on the mechanisms of autophagy in hypoxia-ischemia-induced brain damage. Currently, she has hosted a National Natural Science Foundation-Youth Foundation (No.81502157), and obtained awards from Jiangsu Provincial Medical Youth Talent (No. QNRC2016758) and applied for Foundational Research of Medical and Health Care of Suzhou City (No.SYS201646). She also have been published many papers.

xulixiao2013@hotmail.com

Notes: