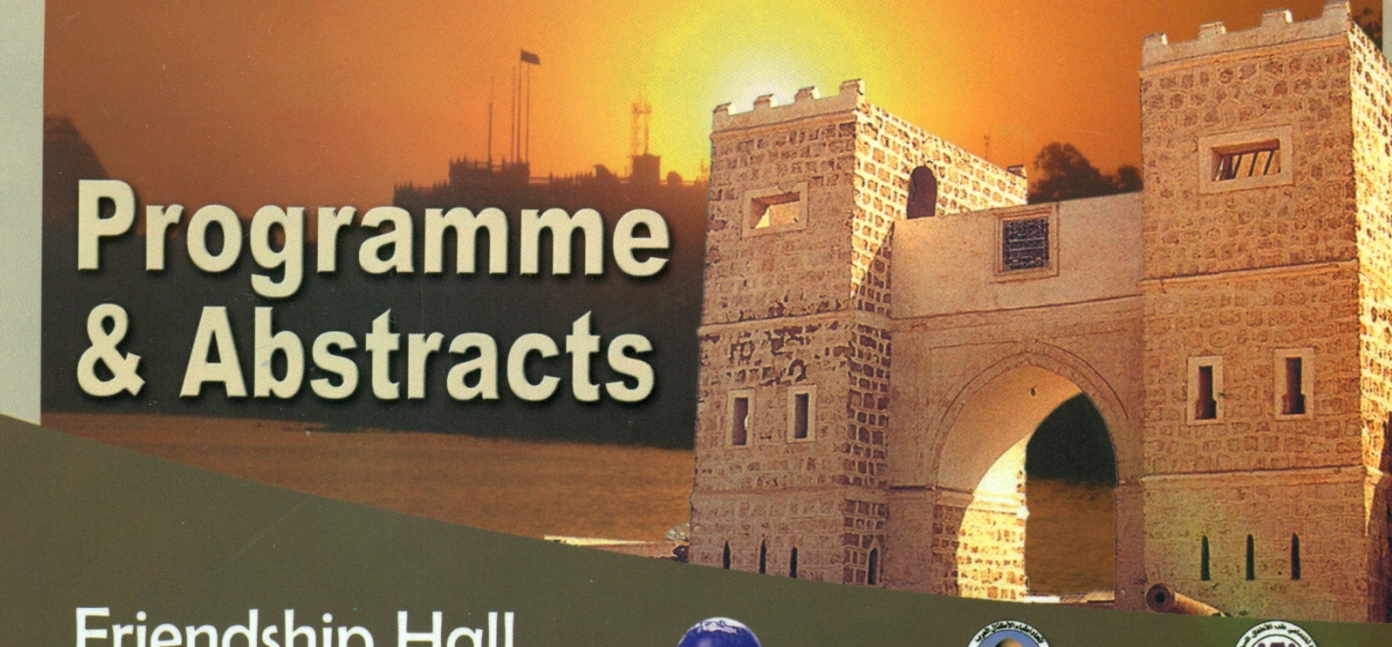
Under the Patronage of:
H.E. Vice-President of Sudan
Ustaz Ali Osman Mohamed Taha

The 15th Congress of the Union of Arab Paediatricians

Union of Arab Paediatricians
in Collaboration with
Sudan Association Paediatricians



Programme & Abstracts

Friendship Hall
Khartoum - Sudan
12 - 15 Nov. 2007

المؤتمر العاشر للرابطة العربية
لأمراض جهاز الهضم
والتغذية عند الأطفال

The 15th Congress
of the Union of
Arab Paediatricians

المؤتمر الخامس عشر
لجمعية إختصاصيي
طب الأطفال السودانية

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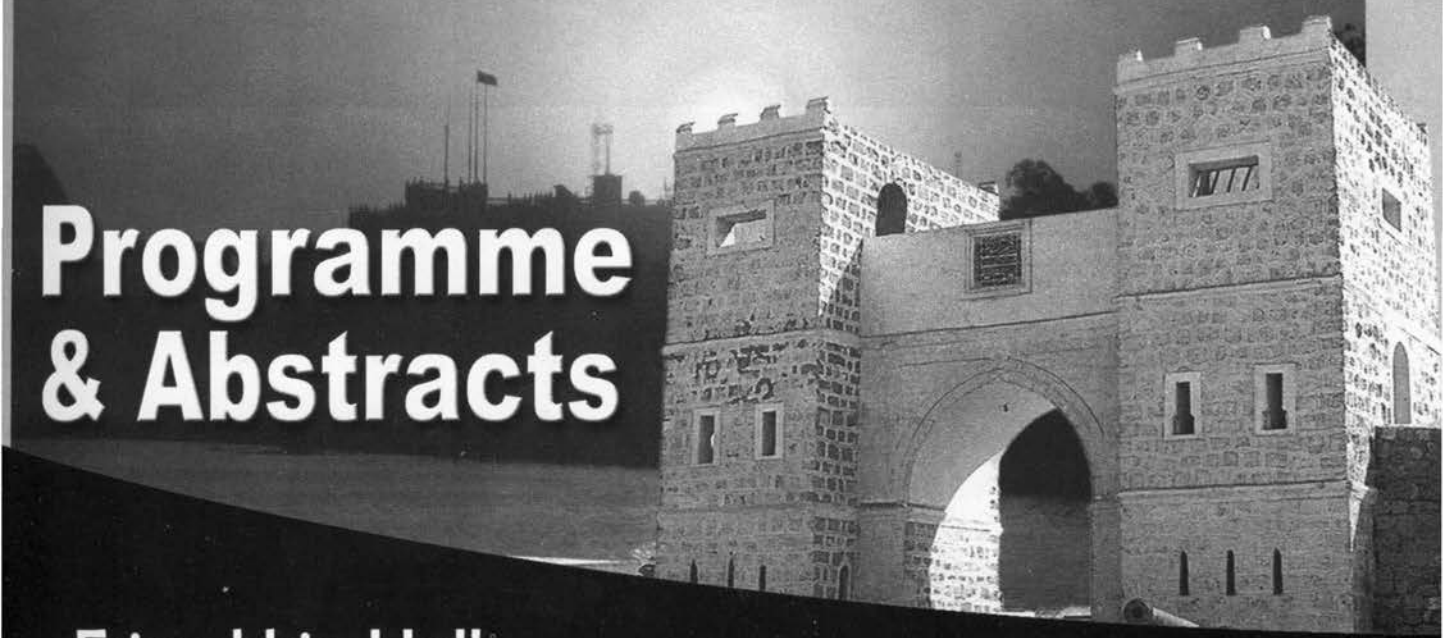

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المؤتمر الخامس عشر
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Guest speakers

1. Prof. Robert A. Minns
Professor of Paediatric Neurology
and head of child life and health
College of Medicine and Veterinary
Medicine
University of Edinburgh
20 Sylvan Place
Edinburgh, EHg1UW, UK

2. Prof. A. C. Ryan
Professor of Paediatrics and Neonatology
Cork Maternity Hospital
University College Cork
Ireland

3. Prof. Najwa Khuri Bulos
Professor and chairman
Department of Paediatrics
Jordon University Hospital
Amman, Jordon

4. Prof. M. I. A. Omer
Unit of Child Health
Faculty of Medical Science Complex
Uriah Butter Highway
Champs Fleurs
Trinidad and Tobago, West Indies

5. Dr. Taha Altahir Taha, MBBS PhD
John Hopkins University
Bloomberg School and Public Health
Baltimone, MD, USA

6. Dr. Ahmed Ibrahim Mukhtar
President of British Sudanese Association
of Paediatricians (BSAP), UK

7. Prof. Mustafa Abduella M. Salih
Professor of Paediatric Neurology
Department of Child Health
King Saud University
Riyadh, Saudi Arabia

8. Prof. A/Kareem Al-Quada
Professor of Paediatric Neurology
Faculty of Medicine
Jordan University
Amman, Jordan

9. Dr. Sami E. Ahmed
Consultant Paediatrician
Bon Secours Hospital
University College Cork
Cork, Ireland

10. Dr. Aziz koleilat , MD
Chairman
Deportment of Paediatrics
Makassed Hospital
Beirut – Lebanon

11. Dr. Khalid Alanasri
Professor of Clinical Paediatrics
Consultant Paediatric Emergency
Weill Cornell – Qatar

12. Dr. Osama Algibali
PICU Consultant
HMC, Doha, Qatar

13. Dr. Mohammed S. Rashed
Department of Genetics
MBC-03, King Faisal Specialist Hospital and Research Centre
Riyadh, Saudi Arabia

14. Dr. Mohammed M. Kabiraj
MBBS, M Phil, PhD (USA)
Consultant Clinical Neurophysiologist
Division of Clinical Neurophysiology
Department of Neuroscience
Armed Forces Hospital,
Riyadh, Saudi Arabia

15. Mr. Kieran Henry
Cork Maternity Hospital
University College, Cork
Ireland

16. Mr. Danny O' Regan
Cork Maternity Hospital
University College, Cork
Ireland

Programme at a glance

Day	Monday 12th Nov.	Tuesday 13th Nov.			
Venue / Time		Regional hall	Africa hall	Omdurman hall	Khartoum hall
8:30 - 10:30	**Pre-conference:**	Plenary I			
10:30-11:00	1) Work shops • Epilepsy (SUH) • Diabetes (SUH)	Coffee Break			
11:00-13:15		Session 1 **Neurology I**	Session 2 **Cardiology**	Session 3 **Community Paediatrics**	Session 4 Symposium I **PHC**
13:15-13:30	2) Training courses • NRP (EDC) • PALS (SNMSB)	Coffee Break			
13:30-15:30		Session 5 **Neurology II**	Session 6 **Nephrology**	Session 7 **Haematology & oncology**	
15:30-17:10	**Lunch**	**Lunch**			
19:30-22:30	**Opening ceremony Friendship hall**	**Session 8 Nestle symposium Alsalam Rottana**		+	**Dinner and Gala Night**

Wednesday 14th Nov.			Thursday 15th Nov.		
Regional hall	Africa hall	Omdurman hall	Regional hall	Africa hall	Omdurman hall
Plenary II			Plenary III		
Coffee Break			Coffee Break		
Session 9 Gastro-enterology	Session 10 Endocrinology & metabolism	Session 11 Symposium II: Promoting Paediatrics & Child Health Need for Co-Ordination	Session 15 Neonatology II	Session 16 Infections	Session 17 Symposium III Children in Conflict areas
Coffee Break			Coffee Break		
Session12 Nutrition	Session 13 Free communications	Session 14 Neonatology I	General Assembly SAP		
Lunch			Lunch		
Dinner Khartoum Hilton Host: Sudan Association of Paediatricians			Dinner Oil House Host: Minister of Interior		

PROGRAMME IN DETAILS

Monday, November 12th, 2007

PRE-CONFERENCE WORKSHOPS & TRAINING COURSES
8:30 -15:30

WORKSHOPS:

EPILEPSY IN CHILDHOOD	SUH
DIABETES IN CHILDHOOD	SUH

TRRAINING COURSES:

NEONATAL RESUCITATION PROGRAM (NRP)	EDC
PAEDIATRIC ADVANCED LIFE SUPPORT (PALS)	SNMSB

REGISTRATION & OPENING CEREMONY
Friendship Hall **19:30 – 22:30**

Tuesday, November 13th, 2007

PLENARY SESSION 1
Regional Hall **8:30 – 10:30**

Co-chairs: Prof. Salah Ahmed Ibrahim, Sudan
Prof.Husein Kamil Bahaldeen, Egypt

PI	Challenges of The 21st Century	Prof. Hussein K. Bahaaldeen, Egypt
PII	Infantile Hydrocephalus	Prof. R A Minns, UK
PIII	New Neurogenetic Disorders: Contribution of Our Region	Prof. Mustafa A Salih . Sudan

10:30 – 11:00 **COFFEE BREAK**

Session 1 **NEUROLOGY I**
Regional Hall **11:00 – 13:15**

Co-chairs: Prof. Robert Minns, UK
Prof. A-karim Al Qudah, Jordan
Prof. Mabyoua M Abdelwahab, Sudan

OP01	The Child With Neurodevelopmental Delay	Hadi Almalik , UAE
OP02	Neurobiology of Tourette Syndrome	V. Eapen, UAE
OP03	Botulinum Toxin in Management of spasticity in children	Abdelkarim Algoda, Jordan
OP04	Mitochondrial Disease of the Brain	Khalid A. Mohamed, UAE
OP05	Childhood Status Epilepticus	El-Sayed Ali, KSA
OP06	The Convulsive Status Epilepticus: protocol For Children	Khalid O. Ibrahim, UK

Session 2 **CARDIOLOGY**
Omdurman Hall **11:00 – 13:15**

Co-chairs: Dr. Ali Al-halabi, Jordan
Dr. M J Goodman, KSA
Dr. Alfatih Abu Zeid, Sudan

OP07	The Natural History of Treated &Untreated tetralogy of Fallot	M. J. Goodman, KSA
OP08	Suitability of PaediatricCardiac Patients for Transcatheter Interventions	Ali M. Al-Halabi, Jordan
OP09	Impact of RSV with Pericardial Effusion on the heart Function of Infants &Children	A. Al jarallah, KSA
OP10	Interventional catheterization for congenital heart disease: Experience at the Sudan Heart Centre	Sulafa K M Ali, Sudan
OP11	Balloon Angioplasty for Native Aortic Coarctation	Ikram Masoud, Egypt
OP12	Pattern of Congenital Cardiac Disease in Children &Adults in A.Gasim Hospital	Osama H Shazali, Sudan
OP13	Pattern of Infective Endocarditis in a Specialized Children Hospital in Khartoum	Samia Hassan, Sudan

Session 3 **COMMUNITY PAEDIATRICS**
Africa Hall **11:00 – 13:15**

Co-chairs: Dr. George Haj, Lebanon
Prof Hassan Mohd Ahmed, Sudan
Dr. Khalid Alkhir, Sudan

OP14	Screening for psychological problems in Children Attending Paediatric Clinics	Al-Ayed Ibrahim, KSA
OP15	Community Service Oriented Study on prevention of Accidents &Violence in Yemen	A Ishak, Yemen
OP16	Mental Child Abuse	A M Telmesani, KSA
OP17	Preliminary perception of Attending Physicians to Implementation of North American Paediatric Curriculum in Middle Eastern Hospital: Needs Assessment	Amel Khidir, Qatar
OP18	Enuresis Management Guidelines	Sami Ahmed, Ireland
OP19	Towards an Effective Patient safety Culture	Yousif Ishag, KSA
OP20	Harmful traditional practices	Amel Aziz Malik

Session 4 **SYMPOSIUM (I)**
PRIMARY HEALTH CARE
Khartoum Hall **11:00 – 13:15**

13:15 – 13:30 **COFFEE BREAK**

Session 5 **NEUROLOGY II**
Regional Hall **13:30 – 15:30**

Co-chairs: Prof. Mustafa Abdulla, KSA
Mohamed Al Rashed, KSA
Dr. V Eapen, UAE

OP21	Towards reducing the impact of inborn errors of metabolism in Arab population: A neonatal Screening program	Mohamed Alrashed, KSA
OP22	Stroke in Sudanese Children: Epidemiology, Clinical Features &Risk Factors	Ibrahim Gamaraldawla, Sudan
OP23	EEG and childhood epilepsy: Management updates	Mohammed M Kabiraj, KSA
OP24	Alpers Syndrome Presenting as Focal Status Epilepticus	Khalid A. Mohamed, UAE
OP25	Attention Deficit Hyperactivity Disorder	Wiam A. Arabi, Sudan
OP26	Intracranial Space Occupying Lesions in Children	Gawahir M. Mukhtar, Sudan

Session 6 **NEPHROLOGY**
Omdurman Hall **13:30 – 15:30**

Co-chairs: Prof. Mahmoud Fathalla, Syria
Dr. Eltigani Mohamed Ahmed, Sudan
Dr. Suaad Altigani, Sudan

OP27	The Mystery of Urinary Tract Infection in Children	Mahmoud Fathalla, Syria
OP28	Paediatric Nephrology Services in Sudan	Eltigani M. A Ali, Sudan
OP29	Clinico-pathological Analysis of Kidney Disease in Children	Bassam Saeed, Syria
OP30	Pattern of Glomerular Disease in Sudanese Children	Mohamed B Abdelrahim, Sudan
OP31	Malnutrition in Children with Chronic Renal Failure	Husein Abdo, Sudan

Session 7 **HAEMATOLOGY & ONCOLOGY**
Africa Hall **13:30 – 15:30**

Co-chairs: Prof. A/kareem Yahia Rase, Yemen
Prof Sayda Basharr, Sudan
Dr. M. A. Elkhatib, Sudan

OP32	Acute Chest Syndrome in Sickle Cell Disease	Zakaria M Al Hawsawi, KSA
OP33	Relationship of Sickle Cell Gene to the Ethnic and Geographical Groups in Sudan	Bakheita Atalla, Sudan
OP34	Effect of Aspirin on the Severity of Sickle Cell Anaemia	Abdelrahim O Mohamed, Sudan
OP35	Work Up of an immune-deficient child	Amel Hassan, UK
OP36	Pattern of paediatric malignancy presenting to radioisotope centre, Khartoum 2004 -2007	M.A. Alkhatib, Sudan
OP37	Evaluation of the use of Erythropoietin in the management of CRF	Amani Gindeel, Sudan
OP38	Iron Status in Severe Protein Energy Malnutrition	Magda Ishag, Sudan

15:30 – 17:00 **LUNCH**

19:30 – 21:30 **NESTLE SYMPOSIUM**
INFANT NUTRITION: SCIENCE & ETHICS
Session 8 **Al Salam Rotana Hotel**

Co-chairs: Prof. Zein A Karrar, Sudan
Prof. Ahmed Younis, Eygpt

OP39	Protein requirement in Infancy	Prof. Aziz Koleilat, Lebanon
OP40	WHO Code to Milk Substitute Promotion	Prof. Ahmed Younis, Eygpt
OP41	Nestle nutrition Institute	Dr. Ibrahim Ismail, Nestle, UAE

DINNER & GALA NIGHT
21:30 – 23:00 **Al Salam Rotana Hotel**

Wednesday, November 14th, 2007

PLENARY SESSION 2
Regional Hall **8:30 – 10:30**

Co-chairs: Prof. Mohamed I Omer, Trinidad
Prof. Tony Ryan, Ireland

PIV	Medical education in Africa & Some Arab Countries	Prof. Mohd.I.Omer, Trinidad
PV	Ethical decision making in the newborn period	Prof.Tony Ryan, Ireland
PVI	Paediatric endocrinology in Sudan	Prof. Mohamed A. Abdullah, Sudan

10:30 – 11:00 **COFFEE BREAK**

Session 9 — GASTROENTEROLOGY
Regional Hall — 11:00 – 13:15

Co-chairs: Prof. Mahmoud Fayad, Eygpt
Dr. Mohammed Sir Alkhatim Hashim, Sudan
Dr. Hisham Nazer, Jordan

OP42	Probiotics as Modulators in Atopy	Aziz Koleilat, Lebanon
OP43	Eosinophilic Colitis after Infancy	Mamoun Elawad, UK
OP44	Crigler Najjar Syndrome: Update on Diagnosis& Treatment	Hisham Nazer, Jordan
OP45	Management of Children presenting with Haematemesis	Omayma M Sabir, Sudan
OP46	Indications & outcome of Upper &lower GI Endoscopy in Children	Lana Mahir, Sudan
OP47	Five Years Experience in Celiac Disease Clinic in Ibn Sina Hospital	Ali M E Arabi, Sudan
OP48	Gastrooesophogeal reflux & asthma and cough	Aziz Koleilat, Lebanon

Session 10 — ENDOCRINE & METABOLIC
Omdurman Hall — 11:00 – 13:15

Co-chairs: Dr. Mohamed Almoghamsi, KSA
Prof. Mohamed Ahmed Abdulla, Sudan
Prof Gaafar Ibn Oaf, Sudan

OP49	Neonatal Screening Experience in KSA	Zuhair A Rahbeeni, KSA
OP50	Neonatal Hypothyroidism Screening Program in Almadina , KSA	Mohamed Al Moghamsi, KSA
OP51	A high Diagnostic Yeild in Children Attending A metabolic Centre With Developmental Delay	A Awadalla, Ireland
OP52	An Introduction to Pompe's Disease	Nabil A Yassin, lebanon
OP53	Permanent Neonatal Diabetes Mellitus in Oman	Abdelaziz Elamin, Oman
OP54	Risk Factors &Psychological Effects of Metabolic Syndrome in Adolescents in UAE	A Mabrouk, UAE
OP55	Vitamin D Deficiency Rickets in Yemeni Children	Ahmed Al-Awdi, Yemen

Session 11 — SYMPOSIUM (II)
Promoting the paediatric profession: The need for a coordinating body
Africa Hall — 11:00 – 13:15

Co-chairs: Prof Hafiz Alshazali, Sudan
Prof Abdelwahab Elidrissy, KSA
Prof Ali Habbour, Sudan

13:15 – 13:30 — COFFEE BREAK

Session 12 — NUTRITION
Regional Hall — 13:30 – 15:30

Co-chairs: Prof. Aziz Koleilat, Lebanon
Dr. Ali Ibrahim Salman, Bahrain
Dr.. Mamoun Alawad, UK

OP56	Why Exclusive Breast Feeding for Six Months	Abdelwahab Elidrissy, Sudan
OP57	Exclusive Breast feeding for Six Months Vs Four Months	Zeidan Abdu Zeidan, Sudan
OP58	Partially Hydrolyzed Infant formula: facts & Myths	M Miqdady, Jordan
OP59	Therapeutic feeding Centre program in Port Sudan	Zeinab Gaily, Sudan
OP60	Serum Alpha amylase Stool Fat as a measure Of Exocrine Pancreatic Function in Sudanese Children with Protein Energy Malnutrition	Eltahir M Elshibly, Sudan

Session 13	FREE COMMUNICATIONS	
Africa Hall	13:30 – 15:30	
Co-chairs:	Dr. Abdel Rahman Ishag, Yemen Dr. Yasir Bin Saeed Alghamdi, KSA Prof A/Rahman Mufti, Sudan	
OP61	Mycetoma in children	Prof Ahmed Hassna Fahal
OP62	Chronic constipation: Update to management	Dr. Abdelwahab Altelmesani, KSA
OP63	Hydrocephalus & spina bifida	Dr. Omer Elamin, Sudan
OP64	Kawasaki disease	Dr. Ali Al-Halabi, Joradn
OP65	Surgical management of Bronchiectasis	Dr. Mohammed El-Amin, Sudan
OP66	Noncompaction of the Ventricular Myocardium: A review of 24 patients from the Middle East and Africa	Sulafa KM Ali, Sudan

Session 14	NEONATOLOGY I	
Omdurman Hall	13:30 – 15:30	
Co-chairs:	Dr.Omer Bashir Abdelbasit, KSA Prof Munzir Sheikh Alhaddadin, Syria Prof Eisa Elamin, Sudan	
OP67	Cost of Intensive Care for Premature in Jordan Hospital	Yousif K Abu-Osba, Jordan
OP68	Establishing The neonatal Resuscitation Program in Sudan	Sami Ahmed, Ireland
OP69	Necrotizing Enterocolitis: New basics	Mohamed Bayari, Morocco
OP70	The Impact of Prenatal Management Decisions, Fetal Palliative Medicine	Omer B Abdelbasit, KSA
OP71	Triple Dye plus Rubbing Alcohol versus Triple Dye Alone in Umbilical Cord Care	Alawia Sulieman, USA
OP72	Premeditation for Intubation in Irish Neonatal Units	Sami Elkashif, Ireland

15:30 – 17:00 LUNCH

20:30 – 22:30 DINNER
Hosted by: Minister of Interior - Police Club, Burri

Thursday, November 15th, 2007

	PLENARY SESSION 3	
Regional Hall	8:30 – 10:30	
Co-Chairs:	Prof. Ahmed Saeed Younis, Egypt Prof. Ahmed I Mukhtar, UK	
PVII	Challenges and opportunities of introducing new vaccines	Prof. Najwa Alkhuri, Jordan
PVIII	The dilemma of breast Feeding HIV Infection in Africa	Prof. Taha Eltahir, USA
PIX	Paediatrics & Child Health: The Challenges of the 21st Century	Prof. Ahmed Ibrahim, UK

10:30 – 11:00 COFFEE BREAK

Session 15 — NEONATOLOGY II
Regional Hall — 11:00 – 13:15

Co-chairs: Prof. Alawia Suleiman, USA
Dr. Mohamed Bayari, Morocco
Dr. Mohamed Khalil, Sudan

OP73	Neonatal Outcome of 270 IVF pregnancies at Khartoum Fertility centre	Fawzi A Mahgoub, Sudan
OP74	Neonatal Presentation of PHOX2B Positive Twin with CCHS	Miqdad H Mukahal, Jordan
OP75	Clinical approach of a sick neonate with acute metabolic emergency	Sarar Mohammed, Ireland
OP76	Pattern of neonatal Admissions at Port-Sudan Paed. Hospital Nursery	Khalid Elkheir, Sudan
OP77	الرعاية المقدمة بالقابلات القرويات للاطفال حديثى الولادة	Igbal A Bashir, Sudan
OP78	Clinical pattern, Aetiology & Short term Outcome of Neonatal Seizures in Khartoum	Ishag Eisa, Sudan

Session 16 — INFECTIONS
Africa Hall — 11:00 – 13:15

Co-chairs: Dr. Fawzi Abdelrahim, Sudan
Dr. Yahia Omer Hamza, Sudan
Dr. Abdelaziz Alrashed, KSA

OP79	Bacteraemia in Febrile Children Under 3 Years in Emergency Department	Abdulaziz M Al Rashed, KSA
OP80	Genetics Associated with increased Susceptibility to Cerebral malaria	Adil Mirgani, Sudan
OP81	Efficacy & Safety of ARCO&ART/SP Vs Artemether in Management of F. Malaria	Bakri Y M Nour, Sudan
OP82	Overview of Childhood PKDL & Its Management Using Immuno-chemotherapy	Fawzi A Mahgoub, Sudan
OP83	Control of Aquired infection In Hospitals: Role of Nurse	Batoul A Mohamed, Sudan
OP84	RSV Infection in Children	Abdel Rahman Awad Elkarim,KSA

Session 17 — SYMPOSIUM (III)
CHILDREN IN CONFLICT AREAS
Omdurman Hall — 11:00 – 13:15

Co-chairs: Prof. Salah Ahmed Ibrahim, Sudan
Dr. Mohamed A Malik, KSA
Dr. Attiyat Mustafa

OP85	Child in War Crisis	Mohamed A Malik, KSA
OP86	Post traumatic stress in children in Conflict areas	Fath Alaleem Abdelranim, Sudan
OP87	Dangers of landmines in children	Hassan Alobeid, Sudan
OP88	Child health services in Darfur	Ishag Eisa, Sudan
OP89	Child health services in southern Sudan	Hassan Solong, Sudan

13:15 – 13:30 — COFFEE BREAK

SUDAN ASSOCIATION OF PAEDIATRICIANS
GENERAL ASSEMBLY AND BUISNESS MEETING
Regional Hall — 13:30 – 15:30

15:30 – 17:00 — LUNCH

DINNER

20:30 – 22: POSTER VIEWING

PP01 **Cardiology 01**

CARDIAC ABNORMALITIES OF SUDANESE PATIENTS WITH DOWN'S SYNDROME AND THEIR SHORT TERM OUTCOME.

***Sulafa KM Ali,** FACC, FRCPCH, **Laila AL Mahdi (MD)
Dept. of Paediatrics, Faculty of Medicine, University of Khartoum,Suda
** Department of Paediatric Cardiology, Sudan Heart Center, Sudan

PP02 **Gastroenterology 01**

EOSINOPHILS AND THE ESOPHAGUS
EOSINOPHILIC ESOPHOGITIS... A NEW DISEASE

Aziz Koleilat
Pediatric Department, Director of pediatric residency program.
Makassed University General Hospital, Beirut, Lebanon

PP03 **Gastroenterology 02**

POLYETHYLENE GLYCOL AS A TREATMENT OF CHRONIC CONSTIPATION IN CHILDREN

Elawad, MA; Burnett, CA; Connolly, SA; Sullivan, PB
Department of Paediatric Gastroenterology, John Radcliffe Hospital, Oxford, UK

PP04 **Haematology 01**

ACUTE SPLENIC SEQUESTRATION CRISIS IN CHILDREN WITH SICKLE CELL DISEASE IN NORTH-WESTERN REGION OF SAUDI ARABIA (ALMADINA AL MUNAWARA)

Zakaria M. Al Hawsawi
Consultant Paediatrician & Paediatric Haematologist / Oncologist, Madina Munawara, K.S.A

PP05 **Infection 01**

PREVALENCE OF HEPATITIS C VIRUS ANTIBODIES AMONG CHILDREN WITH CHRONIC RENAL FAILURE IN KHARTOUM STATE

Hind A. M. Elansari,* Ilham M Omer (MPCP)
*Gaafer Ibn Ouf Paediatric Hospital, Khartoum, Sudan
**Dept. of Paediatrics, faculty of medicine, University of Khartoum, Khartoum, Sudan

PP06 **Metabolic/Endocrine 01**

CEREBRAL EDEMA WITH PAEDIATRIC DIABETES KETOACIDOSIS: WHO IS AT RISK?

Mohamed S. Al Maghamsi
Consultant Paediatric Endocrinologist, Madina Maternity and Children's Hospital
Madina Munawara, KSA

PP07 **Metabolic /Endocrine 02**

NEWBORN METBOLLICN SCREENING FROM THE SPOT TO DIGNOSIS AND MANAGEMENT

Sarar Mohamed FRCPCH, MD
Dublin, Ireland

PP08 **Rheumatology 01**

POLYARTERITIS NODOSA (PAN) MIGHT BE MISDIAGNOSED AS FAMILIAL MEDITERRANIAN FEVER

Bassam Saeed.
Pediatric Nephrologist. Pediatric Nephrology Division Surgical Kidney Hospital.
Damascus – Syria

PP09 **Community 01**

TO ERR IS HUMAN

Mohamed Bayari, MD
Casablanca, Morocco

PP10 **Community 02**

SAFE MEDICATION PRACTICE

Yousif Ishag Omer Al Hag
Consultant Paediatrician, King Abdulaziz National Guard Hospital
Alahsa, KSA

PP11 **Nephrology 01**

PECULIAR PATTERN OF NEPHROTIC SYNDROME IN A CHILD WITH HEPATITIS C NEPHROPATHY WHO SUBSEQUENTLY REPONDED TO STEROID THERAPY.

Bassam Saeed.
Pediatric Nephrologist. Pediatric Nephrology Division Surgical Kidney Hospital. Damascus - Syria.

PP12 **Neurology 01**

EFFECT OF ANTIEPILEPTIC DRUGS ON THYROID FUNCTION IN EPILEPTIC SUDANESE CHILDREN

*Salwa Elsir Obeid(MBBS),** Eltahir M. Elshibly(MD, MPH Harvard, FRCPCH)
*Khartoum Teaching Hospital, Khartoum, Sudan
**Department of Paediatrics, Faculty of Medicine, University of Khartoum, Khartoum, Sudan

PP13 **Respiratory 01**

IMPORTANCE OF THROAT EXAMINATION IN DIAGNOSING AND TREATING CHILDREN: A CLINICAL STUDY IN WHITE NILE AREA

Eltigani Hassn Mohamed, MD
Department of Paediatrics. Faculty of Medicine, Imam Almahadi University, Sudan

ABSTRACTS

PI **Plenary 01**

CHALLENGES OF 21st CENTURY

Prof. Husein Kamil Bahaaldeen
President of Egyptian Paediatric Association
President of International Society of Tropical Paediatrics
Cairo, Egypt

- Information Revolution
- Knowledge Intensive Production
- Tailored Economy of Velocity & Creativity
- Ideas, Programmes & Software Replace Hardware
- Brain Power is the Decisive Competitive edge
- Brain Power Development is the Most Cost Effective Investment of the 21st Century
- ARAB COUNTRIES COMPETITIVE EDGE &FUTURE DEPEND ON OUR ABILTY TO INVEST &CAPITALIZE ON BUIDING BRAIN POWER

  WHOSE RESPOSIBILITY

  The discoveries of the brain decade have moved the main responsibility from the educational institution, predestined genetic racial makeup &traditional medical and social care to other stakeholders
- Parents responsible for preconceptional fetal& early childhood
- The mother (helped by father) as first teacher responsible not only for breastfeeding &bonding but also for early childhood education& stimulation :lucky children who have kindergarten facilities have already lost 4 of the1st 6 golden years of life they have the right to receive proper training both in the post marital period &long before in their basic high education
- Medical and social care workers esp. pediatricians general practitioners, obstetricians, nurses &social workers who look for children, beside their particular expertise ,do have a crucial educational& training responsibility which should be reflected in the curriculum of their education& training
- The media
- NGO's

The government which should put **ECD** as top priority goal in planning, investments, resources, legalization. medical care, environmental measures & education

PII **Plenary 02**

INFANTILE HYDROCEPHALUS

RA Minns, FRCP
Professor of Paediatric Neurology, College of Medicine,
University of Edinburgh, Edinburgh, UK

Non-tumoral infantile hydrocephalus affects approximately 1 in 500 children and is frequently diagnosed in fetal life, at the time of birth, or in infancy. Hydrocephalus is a heterogeneous disease due to many causes such as brain trauma, subarachnoid haemorrhage, meningitis, developmental anomalies such as neural tube defects, prematurity and post haemorrhagic hydrocephalus, and genetic causes such as aqueduct stenosis.
This lecture will review CSF physiology and the pathophysiological progression of "active hydrocephalus" through to "shunt dependent" or "shunt independent" arrested hydrocephalus. Mention will also be made of ex-vacuo hydrocephalus and normotensive hydrocephalus.
The clinical signs and symptoms of hydrocephalus are discussed with particular reference to the frequency of abnormal "signs" in infancy while frequent symptoms are the norm in the older child with blocked shunt.
Assessment also involves the use of MRI imaging and sequential ultrasound determinations of the "ventricular index" along with indices of cerebral blood flow velocity (resistive index). Measurement of the intraventricular pressure is discussed particularly as it relates to the management of shunt malfunction and the use of overnight intracranial pressure monitoring through REM sleep phases.

Current treatment consists of pressure or flow controlled valve systems to divert CSF. Refinements of these diversion systems include programmable valves and antibiotic impregnated shunts which are important alternatives to the current convention.

The use of a separate access device and an algorithm to show its usefulness in the management of shunt malfunction will be described along with the risks and benefits of a separate access device. Third ventriculostomy has many proponents and the current indications for this will be included. Management of hydrocephalus in utero, prematurity, tuberculous meningitis and benign intracranial hypertension will serve as specific examples.

Complications of shunting systems such as blockage and the clinically useful "compensation signs" of blockage, as well as ventriculitis and overdrainage with slit ventricles and slit-ventricle syndrome, will also form part of this lecture.

P III **Plenary 03**

NEW NEUROGENETIC DISORDERS: CONTRIBUTION OF OUR REGION

Mustafa A.M. Salih, MPCH (U of K), MD (U of K), Dr Med Sci (Uppsala), FRCPCH (UK)
Professor, Division of Pediatric Neurology, Department of Pediatrics,
College of Medicine, King Saud University,
Riyadh, Saudi Arabia

Over the past two decades, there has been remarkable achievement in the fields of cellular neurobiology and molecular neurogenetics. Determination of the molecular pathogenesis of genetic neurological disorders is indispensable to the development of pharmacologic or gene therapy of these disorders. It also plays a vital role in genetic counseling and primary prevention of childhood handicaps.

The present communication highlights the contribution of our Region in the identification of new neurogenetic disorders, or the discovery of the underlying genes, through multidisciplinary, regional and international collaborations. All of these are autosomal recessively inherited, reflecting the high rate of consanguinity in populations of Arab descent in North Africa and the Arabian Peninsula.

1) Syndromes and diseases with gene / locus identification include:
   - 1.1 Severe childhood autosomal recessive muscular dustrophy, including **adhalin** (α-sarcoglycan-deficiency disease). **Adhalin** (derived from the Arabic word **Adhal** for muscle) is one of the dystrophin-glycoprotein complex which is critical to the stability of muscle fibre membranes.
   - 1.2 Salih congenital muscular dystrophy: Autosomal recessive titinopathy causing early onset myopathy/dystrophy with dilated cardiomyopathy.
   - 1.3 Bosley-Salih-Alorainy syndrome (OMIM 601536).
   - 1.4 Charcot – Marie – Tooth Disease Type 4B1 (OMIM 601382).
   - 1.5 A new form of childhood onset, autosomal recessive spinocerebellar ataxia and epilepsy.
   - 1.6 Spinocerebellar ataxia with axonal neuropathy (SCAN1; OMIM 607250).
   - 1.7 Horizontal gaze palsy and progressive scoliosis (OMIM 607313).

2) Syndromes and diseases with gene / locus still unidentified:
   - 2.1 Pellagra-like syndrome (OMIM 260650).
   - 2.2 Muscular dystrophy, congenital, with severe central nervous system atrophy and absence of large myelinated fibres (OMIM 601170).

Dincsoy Salih Patel syndrome: midline malformations, multiple, with limb abnormalities and hypopituitarism (http://diseases101.com ; OMIM 601016).

OP01 **Neurology 01**

THE CHILD WITH NEURODEVELOPEMENTAL DELAY: DIAGNOSTIC APPROACH

Hadi Almalik, MRCP, FRCPCH, CCST, DCS
Senior consultant in Child neurology and developmental medicine
Clinical Associate Professor, Faculty of Medicine, UAE University, UAE

Developmental delay is a common problem in child health and, as such, is a frequent reason for referral of a child for specialty evaluation by a developmental pediatrician or pediatric neurologist. Developmental delays are a group of related, etiologically heterogeneous, chronic disorders that share as an essential feature a documented disturbance in one or more of the recognized developmental domains: motor (gross or fine), speech/language, cognitive, social, and activities of daily living. Usually, the disturbance needs to be significant, that is, a performance of more than 2 standard deviations below the mean on an age-appropriate, norm-referenced ,standardized developmental assessment. Paediatricians must have a clear understanding of how to approach, assessment, investigation and management of children presenting with neurodevelopmental delay. A clinical and diagnostic approach is mandatory if a positive difference to be made to their health and well being. This specialty evaluation of the young child (ie, < 5 years of age) with a suspected developmental delay would concentrate on the following aims and objectives.

(1) Confirming and classifying the suspected delay,
(2) Searching for a possible underlying etiological diagnosis
(3) Arranging for the provision of appropriate rehabilitation service
Interventions
(4) Counseling the family regarding the diagnosis,
(5) Managing any associated medical or behavioral conditions (eg, spasticity, epilepsy, attentional difficulties, sleep disturbances)
These factors may be detrimental for the child's full attainment of his or her intrinsic developmental potential.

OP2 **Neurology 02**

NEUROBIOLOGY OF TOURETTE SYNDROME: STATUS OF THE EVIDENCE

V Eapen
Professor of Child Psychiatry, Faculty of Medicine, UAE University, UAE

Tourette Syndrome (TS), a chronic tic disorder, has been known for more than 150 years. Although it remains under-recognized, more recent epidemiological studies indicate that it is not uncommon. TS, characterized by multiple motor and one or more vocal tics, is genetically determined, although the precise genetic mechanisms are still unknown. Clinicians continue to document the associated symptoms including coprophenomena (inappropriate, involuntary obscene words and gestures), echophenomena (involuntary repeating and copying behaviours) and self-injurious behaviours, while scientists continue to explore the etiology of TS by combining genetic, neuroimaging and neurobiochemical approaches. While basal ganglia is considered to constitute the orchestra of the tic movements, the associated psychopathology such as the Obsessive Compulsive Behaviours (OCB) and Attention Deficit Hyperactivity Disorder (ADHD) have suggested the role of a wider circuitry involving the "fronto-striato-pallido-thalamo-frontal" circuits. Yet another unresolved piece in the puzzle is the role of clinical phenotypes and its link to the putative genotypes. Progress in molecular genetics might one day provide definitive answers to the issue of genetic heterogeneity in TS, but for the time being the debate about clinical phenotypes continue. For clinicians dealing with TS patients, the complexity in the pathogenesis is all too evident while trying to translate this to therapeutic measures in the management of the plethora of core and associated symptoms in TS.

OP3 **Neurology 03**

MANAGEMENT OF SPASTICITY BY BOTULINUM TOXIN IN CHILDREN

Abdelkarim Al-Qudah,
Professor of Child neurology, Faculty of Medicine, Jordan University, Amman, Jordan

OP4 **Neurology 04**

MITOCHONDRIAL DISEASES OF THE BRAIN

Khalid A Mohamed, FRCPCH
Senior Consultant in Paediatric Neurology SKMC Abu Dhabi, UAE

Mitochondria are cigar shaped double membrane organelles that are located in the cytoplasm; there are usually 2-10 mitochondria/cell

Mitochondria have their own DNA (mtDNA) they are essential for cell homeostasis. They play a role in:

- Intracellular signalling
- Apoptosis
- Cellular energy metabolism
- Fatty acid β oxidation
- Respiratory chain to produce ATP

Mitochondrial DNA accounts for 0.5 -1% total cell DNA

The following mitochondrial disorders will be discussed.

Mutations in mtDNA

- Point mutations – maternal inheritance
  - tRNA + rRNA genes
  - Protein encoding genes
- Large scale rearrangements –sporadic, Mendelian inheritance.

Mutations in nuclear DNA – Mendelian inheritance such as. Mutations in RC assembly protein genes + mtDNA maintenance genes

Specific syndromes such as NARP, Leigh's Syndrome and Alpers Disease will be discussed in detail.

OP05 **Neurology 05**

CHILDHOOD STATUS EPILEPTICUS

El-Sayed Ali, FRCPI, DCH, Dip Neuro (London)
Neurosciences department, King Fahad Military Medical Complex
Dhahran, KSA

Status epilepticus in childhood is a medical emergency and a life-threatening condition that requires timely recognition and immediate treatment. Although various definitions of SE have been used, the most commonly accepted is 30-minutes of continuous seizures or two or more seizures without full recovery of consciousness between seizures. The continuous seizure activity of such duration may have the potential for neuronal injury, but it takes many different specific forms that have varying degrees of morbidity and mortality.

Epidemiological data suggest the incidence of SE ranges from 10 to 58 per 100,000 per year for children ages 1 to 19 years in the developed countries. A higher incidence has been reported in infants.

Children may develop SE for may different reasons, but febrile CSE (convulsive status epilepticus) is the commonest single group with a good prognosis in sharp distinction to CSE related to central nervous system infections which have a high mortality.

Various treatment guidelines have been developed for pediatric SE. The current recommendations, including a treatment sequence with antiepileptic drugs (AEDs), were consensus rather than evidence-based, and are currently under revision including redefining the duration considered necessary to diagnose SE

OP06 **Neurology 06**

THE CONVULSIVE STATUS EPILEPTICUS PROTOCOL FOR CHILDREN: THE NEED FOR REVIEW

Khalid Omer Ibrahim
Consultant Paediatric Neurologist, The royal London Hospital
London, UK

The convulsive status epilepticus protocol in children has been mainly an extrapolation from the adult version. Efforts have been made in the past, to try and make the paediatric version more evidence based. However, it is becoming more evident that there are shortcomings in the current guidelines. Areas like pre-hospital management are not covered. This, we feel has an impact on the number of children who needed intensive care admissions and possibly on the uptake of the rescue medication at the community level. Considering the algorithm itself more clarification is needed regarding the use of paraldehyde at which stage and to which group of children.

We have adopted an updated guideline locally, which we hope will address these concerns. We were enlightened by the result of an audit done in our hospital looking at the outcome for children presenting in status and by a wider study on status epilepticus in the north London area. We will talk about the strength of this guideline and the level of evidence available.

OP07 **Cardiology 01**

THE NATURAL HISTORY OF TREATED AND UNTREATED TETRALOGY OF FALLOT

M. J. GODMAN
King Abdulaziz Medical City, King Abdulaziz Cardiac Center
Riyadh, KSA

It is 60 years since the pioneering surgery of Blalock and Taussig transformed the outlook for children with cyanotic congenital heart disease. Without surgery 75-80% of all infants born with Tetralogy of Fallot fail to reach teen age. Death is usually from the consequences of severe progressive hypoxemia. For those who survive without surgery into a teen age there may be additional complications with multi-system effects of cyanosis and others such as aortic regurgitation, fibro calcific stenosis of the aortic valve, systemic hypertension and endocarditis.

Tetralogy of Fallot can be repaired with a surgical mortality of 1-2% but the long term follow-up of survivors indicates that many cases are not cured. Sudden death can occur in up to 6% of survivors. Arrhythmias can be atrial or ventricular. There is improving understanding of the relation between pulmonary regurgitation RV volume loading, QRS prolongation and sudden death. Long term pulmonary regurgitation is not well tolerated as was earlier believed, but the precise timing and indication for re-operation for pulmonary regurgitation remain one of the major challenges for the long term management of Tetralogy of Fallot.

OP08 **Cardiology 02**

SUITABILITY OF PEDIATRIC CARDIAC PATIENTS FOR TRANS-CATHETER INTERVENTIONS

Ali M El-Halabi, MB,BS, MRCP, FPCP, FRCPCH
Consultant Interventional Pediatric Cardiologist, Amman, Jordan

When intervention is anticipated for cardiac defects, the success of the procedure depends on appropriate selection. The selection depends mainly on selecting the most appropriate device and procedure, and selection of the suitable patient for intervention.
In cases of patent ductus arteriosuses, with the exception of preterm neonates and older patients with severe pulmonary vascular disease with definite Eisenminger syndrome **a**lmost all PDA can be closed with transcatheter method**,** with a wide choice of closure devices, depending on the size and shape of the PDA**.** In cases of secundum atrial septal defects the preselection depends mainly on the weight of the patient, the size of the defect and size of the rims. The use of transesophageal or intracardiac echocardiography is crucial for pre-selecting patients and the success of the procedure. All patients that are planned to have ventricular septal defects transcatheter closure should have evidence of left ventricular overload. The distance of a VSD from the tricuspid, aortic or pulmonary valves define the suitability for transcatheter closure.

OP09 **Cardiology 03**

IMPACT OF RESPIRATORY SYNCYTIAL VIRUS WITH PERICARDIAL EFFUSION ON THE HEART FUNCTION OF INFANTS AND CHILDREN

Abdullah S. AL Jarallah, MD, ABP
Associate professor of Paediatrics, Dept. of Paediatrics, King Khalid University Hospital
Riyadh, K.S.A

Introduction: Respiratory Syncytial Virus (RSV) infection has been associated with increased morbidity and mortality in infants with underlying cardiac and pulmonary disease. Patients infected with RSV have demonstrated clinical manifestations other than bronchiolitis. For example, the heart can be involved following RSV infection in the form of heart block, ventricular arrhythmia and a variable degree of pericardial effusion.

Aim: to quantify the impact of RSV infection with pericardial effusion on heart function on infants and children less than two years of age.

Method: using electrocardiography (ECG), chest X-ray and echocardiography.

Results: The findings indicate that pericardial effusion is a rare complication of RSV infection since (27.7%) of 83 patients (with mean age of 7.05+/- 11 months) had significant pericardial effusion of >3mm.

Conclusion: Pericardial effusion should be suspected and evaluated if the RSV infection is either prolonged or not responding to conventional treatment.

OP10 Cardiology 04

INTERVENTIONAL CATHETERIZATION FOR CONGENITAL HEART DISEASE: EXPERIENCE AT THE SUDAN HEART CENTRE

Sulafa KM Ali, FACC, FRCPCH
Assistant Professor, Department of Paediatrics and Child Health, Faculty of medicine, University of Khartoum, Consultant Cardiologist, Sudan Heart Center, Khartoum, Sudan.

Background: Interventional catheterization for congenital heart disease is a rapidly evolving and technically demanding speciality which had been introduced in Sudan recently.

Methods: All patients who underwent interventional catheterization for congenital heart disease at the Sudan Heart Center in the period from July 2004 to July 2007 were included in this retrospective review. Interventional procedures were either done by the author, by a visiting cardiologist assisted by the author or by the visiting cardiologist alone. All patients had pre catheterization clinical and echocardiographic evaluation, immediate post catheterization echocardiography and follow up at 3-6 months intervals.

Results: In the study period 149 patients underwent cardiac catheterization. Of these 96 (65%) were diagnostic and 53 (35%) were interventional. Twenty procedures were done by the author, 16 were done by the visiting cardiologist assisted by the author and 17 by the visiting cardiologist. The age ranged from 1 day to 65 years with a mean of 10 years. Procedures done by the author included balloon dilatation of the pulmonary valve (9), patent ductus arteriosus device closure (8) and balloon atrial septostomy (3). Of those who had pulmonary valve dilatation 7 had severe stenosis that was successfully dilated and two infants had critical stenosis (2 and 3 month old) with a pin-hole opening in whom balloon dilatation could not be performed. All patients with patent ductus arteriosus had successful device closure using the Amplatzer device. All patients who underwent balloon septostomy (1 day, 2 and 3 month old) had acceptable size atrial septal defect but two who presented at 1 and 2 month of age succumbed later for non-cardiac reasons. The procedures done by a joint effort were 16 included pulmonary valve dilatation (3), patent ductus arteriosus closure (11) and atrial septal defect closure (2), all were successful. Procedures done by the visiting cardiologist included patent ductus arteriosus (10), atrial septal defect (3) and ventricular septal defect closure (4).All were successful except one ventricular septal defect which was complicated by device embolization needing urgent surgical intervention. Major obstacles included the lack of regular supply of catheters and occluders and the deficiency of pre and post catheterization intensive care setup.

Conclusion: This initial report shows that although interventional catheterization in Sudan is limited by the availability of human and technical resources yet results are encouraging. Joint work by inviting experienced cardiologist consolidated the local team.

BALLOON ANGIOPLASTY FOR NATIVE AORTIC COARCTATION IN DIFFERENT ANATOMIC VARIANTS.

Ikram Massoud
Cairo, Egypt

Background: Balloon angioplasty for native co-arctation of the aorta in infants and children is gaining acceptance as an alternative to surgery in discrete membranous obstruction.

Objective: The aim of this study is to assess immediate and intermediate term, effectiveness and safety of balloon angioplasty in infant and children with discrete membranous obstruction and with mild complex arch anomalies.

Patients and Methods: Retrospective studies evaluating the immediate and intermediate term result of balloon angioplasty in 46 consecutive patients with native co-arctation of the aorta done between March 1998 – June 2003; 27 infants, 19 children, age ranged from 5 months to 17 years (mean 3.5 ± 3.9 yrs). Isolated discrete fibro-membranous obstruction in 32 patients (18 infants and 14 children) and 14 patients has mild complex arch anomalies (6 patients have discrete obstruction with mild isthmus hypoplasia, 4 patients have long segment diffuse narrowing of the aortic coarctation, 3 patients have involvement of left subclavian at site of aortic coarctation and one patient has discrete narrowing of the transverse arch with another narrowing at the usual coarctation site. All patients were hypertensive for their age and body mass. Fourteen infants (30%) presented with echocardiographic picture of hypertensive cardiomyopathy Follow up (24 months to 60 months) was obtained in 40 patients including blood pressure, Echocardiography – Doppler ultrasound, Angiographic studies were done (12 to 36 months) after the initial procedure in 20 patients.

Results: No early mortality. The procedure was initially successful (increase diameter, no aneurysm, Pressure gradient less than or equal to 20 millimeter mercury) in 43 patients (93%). Three immediate failures (one with " discrete fibro-membranous obstruction " developed fusiform aneurysm without pressure gradient and repeated aortogram after one year , the size of the aneurysm did not show any change and the patient was referred to surgery", and two with mild complex aortic arch anomalies developed aortic aneurysm and also referred for surgery). Forty patients maintained follow up, 32 out of 40 (80%) had maintained cuff pressure gradient 20 millimeter mercury across dilated area. Four patients developed restenosis successfully treated by repeated balloon angioplasty (3 with discrete fibromemberanous obstruction and one patient with mild complex arch anomalies), The other four children continued to have mild gradient (20 – 22 millimeter mercury with systolic hypertension and without angiographic evidence of restenosis but with isthmus hypoplasia, they received atenolol and captopril.. Serial echocardiographic measurement of left ventricular dimension and function revealed significant improvement (P less than 0.01) after balloon angioplasty of aortic coarctation in infants with echocardiographic picture of hypertensive cardiomyopathy.

Conclusion: Balloon angioplasty may be considered as a tool in the armamentarium of management of aortic coarctation in different anatomic variants, taking in consideration the clinical presentation and the age.

OP12 **Cardiology 06 PATTERN OF**

CONGENITAL CARDIAC DISEASE IN CHILDREN AND ADULTS ATTENDING AHMED GASIM CARDIAC CENTRE

Osama Hafiz Shazali, MRCPCH
Dept. of Paediatrics, Faculty of Medicine, University of Khartoum
Khartoum, Sudan

Aim: To determine the pattern of congenital cardiac disease in children and adults attending Ahmed Gasim Cardiac centre.

Methods: Retrospective review study of the outpatient's notes, echo reports and files of children attending the paediatric cardiology and the adult cardiology clinics, during the period from January 2005 to July 2007.

Results: A total of 1397 patients attended the paediatric cardiology clinic during this period, 730 patients (52%) were found to have CHD, 179 (13%) were found to have Rheumatic heart disease, 453 (33%) were found to have a normal heart. The commonest cardiac lesion was Ventricular septal defect (VSD) either isolated or in combination in 258 patients(36%) followed by Tetralogy of Fallot (TOF) (13%), Patent Ductus Arteriosus (PDA) (10%), Atrio-ventricular septal defects (AVSD)(complete and partial) in 9%, Pulmonary stenosis in 7%. Twenty five children (ages 3 months – 14 years) with congenital heart disease were seen in the adult cardiology clinic. 4552 patients were seen in the adult clinic , 55 patients (1.2%) were found to have Congenital heart disease and in 53 of them , the diagnosis was not known before the referral to the clinic. The commonest lesions were Atrial Septal defect (ASD)in 18 patients(30%), Pulmonary stenosis in 11patients (18%), Ventricular Septal defect (VSD) in 9 patients(15%), Patent Ductus Arteriousus (PDA) in 7 patients (12%), One patient was found to have Congenitally corrected Transposition and one patient was found to have complex congenital cardiac disease.

Conclusions: Congenital cardiac disease is a common problem in Sudan. More cases are being identified due to increase awareness of the public and the professionals, availability of better diagnostic tools, but some cases are still undiagnosed till adulthood. Some children are still referred to the adult cardiology services. More resources are needed to cope with children with cardiac problems

OP13 **Cardiology 07**

PATTERN OF INFECTIVE ENDOCARDITIS IN A SPECIALIZED CHILDREN HOSPITAL IN KHARTOUM

Samia Hassan Osman (MD), Ghada Shikh Eldin(MD),
ELfatih Abozied, M RCP Dc FAMS), Sulafa Khalid (MRCP)
Gaffer Ibn Oaf Children Hospital, Khartoum, Sudan.

Introduction: Infective endocarditis, although uncommon, is a significant cause of morbidity and mortality in children with cardiac diseases. Early diagnosis and proper management, medical or surgical if indicated is of great value in the prognosis and ultimate outcome.

Aim: To describe the pattern of presentation in patients with infective endocarditis and to study the correlation between the patterns of the presentation, pre-existing cardiac lesion and the short term outcome.

Methods : A retrospective hospital based study was conducted in the cardiology unit in Gafar Ibn Auf specialized hospital from January 2006 to July 2007 . All children diagnosed as cases of infective endocarditis on the basis of Dukes criteria for infective endocarditis (Duke University, Durhan, North Carolina, USA.) were involved in the study. Major criteria were positive blood culture and positive echocardiographic evidence. Minor criteria were fever, presence of a cardiac lesion, new regurgetant heart murmur, vascular phenomenon and immunological phenomenon. A specific questionnaire was filled by the medical team involving demographic data, symptoms clinical signs laboratory investigations including echocardiography.

Results : Among sixteen patients nine were males and seven were females age ranging from 2-15 years most of patients (87%) came from rural and peri-urban areas. Most of patients had rheumatic heart disease, 56.6% pure rheumatic and 12.5% combined with congenital heart disease while 25% had congenital heart disease and 6% had previous surgery for congenital heart disease. Most of patients 93% received antibiotics before the admission. Clinical presentation included fever 100%, hepatomegaly 100%, pallor 93%,clubbing 87%and splenomegaly 81%.Complications were heart failure in 50%, urea in 37%,cardiogenic shock 12.5%and cardiovascular accidents in 12.5%.Blood culture was negative in 94% of the patients with significant relation to previous antibiotic use (p value <0.001).Vegetations were found in 100% of the patients .75%of the patients recovered while 25%died all of them had vegetations larger than ten mm and were candidates for surgery.

Conclusions: Rheumatic heart disease was the commonest preexisting cardiac lesion. Antibiotic use before taking the sample for the culture gave false negative results. Delay in presentation, large vegetation size and difficulty in urgent surgical intervention had significant impact on the outcome.

Recommendations: Infective endocarditis should be excluded in any febrile child with a cardiac lesion .If infective endocarditis is suspected antibiotic should not be started until samples for blood culture is taken. Urgent surgical intervention, if indicated should be done without delay.

OP14 **Community 01**

SCREENING FOR PSYCHOSOCIAL PROBLEMS IN CHILDREN ATTENDING THE PAEDIATRIC CLINIC AT KING KHALID UNIVERSITY HOSPITAL (KKUH) IN RIYADH

Al-Ayed Ibrahim H, Al- Haider Fatimah A.
College of Medicine, King Saud University, Riyadh, K.S.A

Introduction: Psychosocial problems are highly prevalent among children and adolescents.

Aim: To determine the prevalence and type of psychosocial problems among a random sample of children who attended the paediatric clinic at KKUH at the time of the study.

Method: One approach to facilitate recognition and referral of psychosocial problems is to use parent-completed questionnaires as part of routine primary care visits. A 2 part questionnaire was designed for this study. The first part contained basic biographic data in addition to items which reflect the socioeconomic status of the family. The second part comprised the inventory, which is a modified version of Paediatric Symptoms Checklist (PSC). The inventory consists of 38 items classified in 5 categories. The total score of the inventory ranges from 0-114.

Results: 312 questionnaires were returned. The average of the total score is only 22.3/114. The lowest score was 0 and the highest 84. The average score of behavioral symptoms (BS) was the highest (7.03/27) while that of the learning problems (LP) is the lowest (1.5/18). The average score for the mood symptoms (MS) was 5.6/24, that for personality characteristics (PC) was 4.5/24 and that for somatic symptoms (SS) was 4.3/24.

Conclusion: This study revealed the feasibility of screening for behavioral problems among children in the outpatient setting. Implementing screening procedures for psycho-behavioral problems and trining of paediatricians for such screening is necessary for the well-being of our children.

OP15 **Community 02**

COMMUNITY SERVICE OREINTED STUDY ON PREVENTION OF ACCIDENTS AND VIOLENCE IN YEMEN

Ishak, Adulrahman
A. Professor of Pediatrics, Pediatric Department, Faculty of Medicine, Sanaa University, Yemen

Introduction: Yemen is a developing country where mortality and morbidity rates are still relatively high. Accidents "syndrome" is an increasing problem which is almost always associated with or followed by violent behavior, leading to immeasurable mortality and morbidity for all age groups, adding more burden on the already overstretched medical and social services. "Accidents and violence" is becoming an international problem which is increasing at an alarming rate. WHO, regards violence as part of human life, and that, nations worldwide must join efforts, to investigate the roots of the problem and come up with solutions.
Methods: We aimed at introducing continuous service oriented study which depends on training first aids methods, providing basic facilities, conducting health education, and introducing regular computer record for events of accidents and violence. Our study was initiated in some schools, and police force which is responsible for giving immediate help to the victims of violence and accidents in the streets. In both situations there is gross deficiency of training and facilities for first aids as well as documentation of information of events. Creating public awareness was done via TV and radio programmes
Results: 8 schools and 2 military camps were selected. Groups of 20 at schools and 5s at the military camps were trained and provided with first aid facilities. Total number of events (accidents and violence) recorded among school students and those reported via the questionnaire among their families were 3102. Males were 70 % females were 30 % and about half of the victims of accidents and violence were less than 20 years old. Place of accidents was; 25% at home, 55% in the street and 20% at the school. Types of accidents and violence were: 25% car accidents, 41% acts of violence, 23% medical and surgical accidents, and 11% other causes. Among cases of violence reported were 2 occasions at 2 schools of organized sexual abuse of male students. Female students were reluctant to inform about actual sexual abuse during our study. Outcome of violence and accidents varied from, wounds (26%) to fractures (29%) death (17%), and transfer to hospitals without knowing the outcome (28%). Not all active participation in first aid service was possible to record, Among 450 served and recorded: dressing of wounds and splinting for fractures 60%, stopping bleeding 3% and the rest were refereed.
Conclusions: Each act of violence represents a story of its own. Some of the stories are examples of the increasing means of violence,(e.g. beating by iron bars, electric wires, broken glass, homicide and suicide). Our results show just part of the tip of the iceberg if the problem is considered in the whole community

OP16 **Community 04**

MENTAL CHILD ABUSE

Abdulwahab M A Telmesani
Dean of Medicine, Associate Prof. of Paediatrics, Umm Al-Qura University, KSA

In 1993 3 Years James Bulger was mutilated and killed by Jon Venables – Robert Thombson (11 years old boys). The interrogation of the tow boys indicated a link between what they have done and a movie they have watched lately titled child play.
In Kentucky, USA 1997 Michael Corneal 14 years boy open a 22 caliber handgun at the school killing 3 students and injuring 5 others. Pearl, Mississippi 1998 Luke Woodham 16 years boy first kills his mother then went to school and shot 9 students. Similarly the incidents were linked to violent TV/movie films watched by the boys.
In this presentation the impact of the media on our children will be addressed with review of the literature.

OP17 **Community 03**

PRELIMANARY PERCEPTION OF ATTENDING PHYSICIANS TO THE IMPLEMENTATION OF NORTH AMERICAN PEDIATRIC CURRICULUM IN MIDDLE-EASTERN HOSPITAL: NEEDS ASSESSMENT.

A. Khidir, MD, FAAP.
Weill Cornell Medical College, HMC, Doha, Qatar

Background: Weill Cornell Medical College-Qatar (WCMC-Q) is a branch of Weill Medical College (WMC), of Cornell University, New York, USA. It is affiliated with Hamad Medical Corporation (HMC) in Doha, Qatar which serves as a teaching hospital for its undergraduate medical students. HMC and WCMC-Q are mandated to implement the curricula used in the WMC. HMC has established graduate training program but did not have clerkships before July 2006, when WCMC-Q started 3rd year medical students' clinical rotations.
Aims: To identify strengths and opportunities for improvement in pediatric medical education as viewed by attending physicians in HMC. Information from Phase 1 will be used to structure and evaluate a faculty development program, Phase 2: to facilitate and improve implementation of the new curriculum.
Methods: Survey of 7 questions with areas for comments using 5 points scale was distributed to all pediatricians in HMC. A letter was sent with survey explaining process and its anonymity. Pre-addressed envelopes were provided for returning responses to sealed boxes located at different sites in pediatric units.
Results: Participants responded over four weeks with a response rate of 62%. Female: Male ratio 2:3. 86% had graduated from medical school more than 10 years ago.
1. During attending physicians' postgraduate education and career, majority (77%) have been involved in education of trainees (unclear if under- or postgraduate). These trainees are mainly from colleges in the region (83%), i.e. Cairo, Kuwait, Dubai, Jordon, Riyadh, Lebanon, Sudan, India and Pakistan. Only 19% mentioned students from WCMC-Q and 1% mentioned other North American schools. Two-thirds supervised students with direct patient care.
2. Comfort in: A. having students participate actively in patient care 82%, B. teaching different levels of trainee in a clinical setting 86% and C. evaluating students 82%.
3. Ability to: A. manage time effectively in teaching and fulfilling patient obligations 53%, B. have all team members participate actively in discussions related to patient care 69% and C. evaluate students if supervised for enough time 95%.
4. Attending physicians prefer week days vs weekends for scheduling training sessions. Time of day depends on working schedule but more prefer mid-day with respect for prayer times.
Conclusion: 1) Possible factors that might have affected the response rate, a) knowing the investigator, b) extending the deadline and c) sending a reminder letter. 2) Participants indicated their comfort in 5

OP18 **Community 05**

ENURESIS: MANAGEMENT GUIDELINES

Sami Ahmed, MBBCH, DCH, FRCPI
Department of Child Health and Pediatrics, University College Cork,
Cork University & Bon Secours Hospitals, Cork, Ireland.

Bedwetting can be a night mare for both children and their families; it is often underestimated and hidden from view. Active intervention is recommended instead of waiting until he child "grows out of it". These guidelines are designed to provide up to date and necessary information for assessment and management of bedwetting. Nocturnal enuresis is often cited as the most prevalent of all childhood problems and according to recent studies, up to 15% of 5 year-olds suffer from enuresis. In addition, 5% of 10 year-olds experience the same condition. Boys are approximately twice as likely as girls to be nocturnally neurotic, whereas the reverse is true of diurnal/day time enuresis where the condition is far more frequent in girls. It is clear that

active intervention is indicated to reduce the risks to the child and to speed the resolution rate. With no intervention the natural resolution is very slow, each year only one in seven or eight children (of all ages) will find their bedwetting naturally improves and resolves.
Choosing the right management approach for the child and his/ her parents, decreases the time to dryness, reduces stress and is also cost effective. Most children respond to correct management and become dry within 3-4 months, whereas inappropriate approaches can prolong the wetting, add to emotional stress and increase professional time and costs. Approaching management this way gives children the best opportunity to successfully overcome their bedwetting problem.

OP19 **Community 06**

TOWARDS AN EFFECTIVE PATIENT SAFETY CULTURE

Yousif Ishag Omer Al Hag, MBBS, DCH, CAPB, MRCP
Consultant Paediatrician, King Abdulaziz National Guard Hospital, Alahsa, KSA

Medical knowledge has been expanding at a fast pace over the last few decades with more complex modalities of investigations and treatment. This was accompanied by more difficult medico-legal and ethical issues. Being in Islamic societies, with most of the advancement coming from the Western countries, has put pressure on the health care providers to make more effort to keep with the ongoing process, with consideration for values and beliefs of our patients and societies. Children need adequate nutrition, love and security at home, a safe environment, education, access to good health care and protection from exploitation. These needs are also required when children are admitted to hospitals for medical care, hence, the need for quality improvement and patient safety in hospitals.
Patient safety in hospitals is one of the important goals in medical practice as governed by the code of medical ethics. The aim is to avoid malpractice, negligence, medication errors, and others. Patient safety culture is the responsibility of every staff in the hospital right from housekeeping, security, to nurses, physicians and other hospital staff who may not have direct contact with patients but whose work directly affect patient care such as pharmacy, laboratory, x-ray, medical engineering, etc. It is a team work if success is to be achieved! The safety culture of an organization is the product of individual, group values, attitudes, perceptions, competencies, commitment and proficiency of an organization's health and safety management.
The aim of this presentation is to discuss the issues related to patient safety and quality improvement in hospitals to promote safe medical practice in our countries and to put suggestions and recommendations that may be effective to change behaviors and attitudes towards patient safety.

OP20 **Community 20**

HARMFUL TRADITIONAL PRACTICE IN PORT SUDA PAEDIATRIC HOSPITAL

Dr Amel Aziz Malik, MD (U of K)
Head of Paediatric Department, Red Sea University, Port-Sudan, Sudan

Introduction: Traditional medicine is a cultural gem of various communities around the world especially in Africa.
Aim: This study was designed to find the type and extent of harmful traditional practices in 560 hospitalized children less than seven years in Port Sudan Pediatric Hospital ,Red Sea State, Sudan.
Results: The result of the study showed high rates of milk teeth extraction 51% (gums were cut or cauterized into canine buds). In 18% Uvulectomy were performed for treatment of chronic cough, vomiting and as tradition. Hard palate elevation in 31%.Cautery at different site of the body in 23%.And Scarification in 9%. In 77% of the studied females FGM (Female Genital mutilation) is either performed or is planned later. Before 4 month of age 26% of the studied group was given local milk butter (Forsa).

Conclusion: The damage done by these harmful practices in unhygienic conditions includes local infection, pain, hemorrhage, septicemia, tetanus, malnutrition, psychological trauma, death and possible transmission of hepatitis and HIV. Although many children survive these ill advised procedures and their complications, the considerable damage done to some of the children makes these procedures serious health hazards. Intensive health education with local relevant health activities to reduce these harmful traditional practices is recommended.

OP21 **Neurology 07**

TOWARDS REDUCING THE IMPACT OF INBORN ERRORS OF METABOLISM IN ARAB POPULATION: A NEONATAL SCREENING PROGRAM

Mohammed S Rashed
Department of Genetics, King Faisal Specialist and Research Centre, Riyadh, KSA

OP22 **Neurology 08**

STROKE IN SUDANESE CHILDREN EPIDEMIOLOGY, CLINICAL FEATURES AND RRISK FACTORS

Ibrahim G. D. Ibrahim, DCH, FRCP MRCPCH, Salma Elnemas, MBBS
Eltayeb Ahmed , MBBS Islamic University ,Khartoum, Sudan
Dept. of Paediatrics, Faculty of Medicine, university of Khartoum, Khartoum, Sudan

Aim: To describe the epidemiology and clinical features of stroke in a prospective study of Sudanese children and to ascertain the causes, pathogenesis and risk factors.

Method : The study include all children admitted with stroke in Gaffar Ibn Auf children hospital in Khartoum, Sudan . in a period of twelve months(Oct 2006-Sep2007) the cases of stroke were evaluated by the authors at the time of admission in different units.

Results : During this period of 12 months 69 cases were recruited in the study. 39 males (56. 5%) 30 females (43. 5%) the age range 45 days to 15 years all patients are Sudanese (100%).the average age is 65 months the calculated annual hospital frequency rate of stroke is 939/100.000 of the pediatrics population. Major risk factors where identified in 31 patient (45%) due to infectious disorders, (purulent. meningitis, meningiocephalits, brain abscess and malaria) the second risk factor is prothrombatic and coagulation 19pt((27.5%), where sickle cell anemia is main cause is this group 18pt(26%) brain tumors 5pt (7.2%) cardiac diseases 2pt(2.8%) postictal 3pt(4.3%) post traumatic1pt(1.4%) congenital cerebrovascular anomalies 1pt(1.4%) where no risk factor could be identified in 7pt(10%).

Conclusion: Meningitis and CNS infection is a major risk factor followed by sickle cell anemia. Cases of strokes need thorough investigations. MRI, MRA, MRV are necessary investigations to ascertain the pathogenesis of stroke.
Further studies are needed to analyze different risk factors.

OP23 **Neurology 09**

EEG AND CHILDHOOD EPILEPSY: MANAGEMENT UPDATE

Mohammed M Kabiraj
Consultant neurophysiologist, Division of Clinical Neurophysiology, Department of neuroscience, Armed Forces Hospital, Riyadh, KSA

OP24 **Neurology 10**

ALPERS SYNDROME PRESENTING AS A REFRACTORY FOCAL STATUS EPILEPTICUS:

Khalid A Mohamed, Elamin Ahmed, Waseem Fathalla and Howard Parsons
Paediatric Neurology Division, Paediatric Department, SKMC, Abu Dhabi, UAE

Patient 1: A 5 year old boy first presented to the local hospital with several episodes of focal seizures, he was treated with IV Midazolam and the seizures settled initially. CSF analysis revealed 10 white cells and a presumptive diagnosis of encephalitis was made, he was started on Acyclovir and Carbmezapine and Phenytoin and transferred to our referral centre. He continued to have left side focal seizures mainly upper limb and face, developmental enquiry elicited history of moderate motor and speech delay and developmental regression. EEG showed persistent right sided spike and polyspike complexes. MRI scan revealed an area of high signal on the T2 and Flair images in the right basal ganglia and thalamus.
His laboratory profile was Normal apart from elevated lactate at 3.5.
Testing for Polymerase Gamma (POLG) Mutation was Positive confirming the clinical diagnosis of Alpers disease.
Patient 2: a six month old baby boy presented to our centre with focal seizures and encephalopathy, his seizures were resistant to a number of antiepileptic medications, he did have a sister who was given a clinical diagnosis of Alpers disease when she died of fulminant hepatic failure following treatment with valproate, this patient also tested positive for the PolG alpha mutation and was confirmed as Alpers Disease.
Conclusion: Alpers disease should be suspected in patients presenting with persistent focal status especially in the presence of developmental delay/regression. Initial therapy with Valproate should be avoided in such patients.

OP25 **Neurology 11**

ATTENTION DEFICIT HYPERACTIVITY DISORDER: CLINICAL PRESENTATION, RISK FACTORS AND EFFECT ON FAMILY

Wiam Ahmed M.A Arabi (MD),* Salah A. Ibrahim (FRCP,FRCPCH,FACCP,MD)
*Khartoum Teaching Hospital, Khartoum, Sudan
**Department of Paediatrics, Faculty of Medicine, University of Khartoum, Khartoum, Sudan

Introduction: ADHD is the most common neurobehavioral disorder of childhood. It affects the child's social interactions and learning ability.

Aims: to study the pattern of clinical presentation of (ADHD) among children aged 2-18 years, the effect of the disorder on the child and family dynamics and the possible effect of food containing sugars, additives or preservatives as a causative factors of the disorder.
Methods: This is a descriptive, cross sectional, facility-based, case-control study conducted in the Military Hospital, Khartoum Teaching Hospital, Centers for children with Special Needs in Khartoum state, during the period from July to February 2007. The study tools included questionnaires as well as psychological

assessment according to the ICD-10 that depends mainly on criteria of inattention, hyperactivity and impulsivity.

Results: The study included 146 children: 73 cases and 73 matched controls; male to female ratio was 1.35 : 1; 26 of the children (36%) were below 5years, 32 between 5-10years (44%), while 15 were above 10years(21%). The commonest presenting symptoms were in the inattention component of the disorder. Among the controls symptoms of hyperactivity were more prevalent than the other two symptoms. Some symptoms of hyperactivity occurred more in males, symptoms of inattention were found more in last born children in comparison to middle and first born; family history of similar condition was found more in males. It was also found that the disorder occurred more with increase in the family size, it was more in last born and middle born children.

Discussion: The disorder had adversely affected the social interactions of the cases with family and with peers, it had created stress in the relationships between parents, where 34% were not coping well, and 23% were having problems. Children with ADHD had poor school performance in51 (69.8%) of the cases, males did better than females. It was noticed that the child's age affected relations with father, siblings and peers; while it had no effect on mother-child relationship, also with regards to child's position in the family, last born were doing better with mother while middle and first born did better with peers. Foods containing sugars, additives and preservatives were found to be more consumed by the cases compared to controls. Further detailed studies are needed to clarify this issue.

OP26 **Neurology 12**

CLINICAL PATTERN AND IMAGING FINDINGS OF INTRACRANIAL SPACE OCCUPYING LESIONS IN CHILDREN

*Gawahir M A Mukhtar(MD),** Zein A. Karrar (FRCP,FRCPCH, MRCP (UK))
*Khartoum Teaching Hospital, khartoum, Sudan
**Department of Paediatrics, Faculty of Medicine, University of Khartoum,Khartoum, Sudan

Aim: To study the clinical presentations, causes and the imaging findings associated with the intracranial space occupying lesions.

Method: A cross-sectional and prospective hospital based study done in one specialized paediatric neurology centre and two paediatric general sections. The duration of the study was from 1st of September 2005 to the end of February 2007.

Results: The study included 103 children; male to female ratio was 1.7:1. One third of children were below 5 years of age, 31% between 5-10 years and 35% were above 10 years. The study tools included questionnaire, clinical examination and investigations including brain C.T and MRI studies. The commonest intracranial SOL was astrocytoma (35.0%), followed by abscess (19.4%) and medulloblastoma in (10.7%). Headache was found to be the main presenting symptom occurring in (59.2%).Cranial nerves involvement was the commonest clinical sign detected in (43.7%) followed by gait disturbance detected in (42.7%) respectively. The commonest fundal change was papilloedema (18.5%).Most of lesions detected were supratentorial (72.8%) and they were found to be commonly benign in nature (54.7%), malignant lesions like astrocytoma, medulloblastoma and epindymoma were confined mainly to infratentorial area (78.6%). Malignant lesions affected males more than females (1.6:1). Ventricular dilatation was the common imaging finding detected in (46.7%). Malignant lesions (65.6%) needed V.P shunt operation more than benign lesions (35.0%).Congenital heart disease (4.8%), was a risk factor for brain abscess. Tuberculoma was detected less than expected (1.9%).

Recommendations: To consider headache and vomiting early warning signs, proper evaluation of children and use of CT and MRI to detect lesions early. Decentralization of services and training of general doctors and paediatricians

OP27 **Nephrology 01**

THE MYSTERY OF URINARY TRACT INFECTION IN CHILDREN

Mahmoud Fathalla M.D.
Paediatric Nephrologist, President of The Syrian Paediatric Society, Damascus, Syria

Urinary tract infection is a common problem, it could be over diagnosed or under diagnosed, and it could lead to significant late morbidity in infants and children. There is a better understanding of urinary tract infection's pathogenesis, risk factors, and preventive factors, therefore the prompt and appropriate evaluation and management are essential for minimizing the early and long-term morbidity. Escherichia coli is responsible for 85% of urinary tract infections, other gram-negative bacteria include enterobacter, Klebsiella, and proteus. Gram–positive organisms are less common causes of urinary tract infections;such organisms include staphylococcus aureus, group B streptococci. Urinary tract infection is the most common serious bacterial infection in febrile infants; the prevalence of urinary tract is sex and age dependent. Girls are more prone to urinary tract infection than boys regardless of age; however male infants younger than 2 months of age are more likely to have urinary tract infection than girls of the same age, but once above the age of 2 months girls have 2 – 3 folds higher risk than boys. On the other hand, uncircumcised boys have a tenfold higher risk for UTI than circumcised boys less than one year of age. The incidence of asymptomatic bacteruria is about 1.2% of girls and 0.03% of boys. During school age the incidence increases in girls to 5%. It has been found that treating children with asymptomatic bacteruria will increase the rate of recurrences in 10% of the cases. Also studies showed no evidence of a higher risk of acute pyelonephritis in untreated patients compared to those who where treated. The goal of management in paediatric UTI is to minimize future morbidity. Prompt, appropriate and thorough evaluation of UTI is the key to achieve that goal. When prophylaxis is indicated, a different agent should be used than that used to treat the acute phase. Asymptomatic bacteruria with normal urinary tract may not need antibiotic therapy, since the responsible bacteria may be less pathogenic, and may actually play a role in preventing infection with more virulent strains. It is noteworthy to mention that the inflammatory response is important for the clearance of bacteria; hence, the use of anti-inflammatory agents may reduce the clearance.

OP28 **Nephrology 02**

PAEDIATRIC NEPHROLOGY SERVICES IN THE SUDAN

El-Tigani M.A. Ali, Mohamed B. Abdelraheem
Paediatric Nephrology Unit, Soba University Hospital, University of Khartoum, Sudan

Sudan is the largest country in Africa with a population of about 34.331 millions and an annual growth rate of 2.2% (UNFPA 2005). The median Age of the total population is 20.4, Population 0 – 14 years is 45%, Population 60 years and above is 5.8%. According to some estimates, over 90 per cent of the Sudanese population survives on less than $1 per day, the country's population and health data are generally weak. Children up to the year 2000 used to be seen by adult nephrologists and the main dialysis modality was intermittent peritoneal dialysis (IPD)

Children were taken for Haemodialysis on regular basis for the 1st time in 2002 at Khartoum Dialysis Centre which was renamed as Dr.Salma Dialysis centre. There was no transplantation in children. The pediatric nephrology unit at Soba University Hospital started by IPD in 2000 then progressed rapidly and included most modalities of renal replacement therapy in 2004. Since we started the service in Dec 2004 the number of patients is increasing. Children with CRF were 61 in 2005, 73 in 2006 and 68 up-to-date in 2007, while children with ARF were 40 in 2005, 26 in 2006 and 47 in 2007. Renal biopsies increased from 55 in 2005 to 94 in 2006. The great achievement with in kidney transplant and 11 children were transplanted in 2007.

In conclusion the outcome of the paediatric nephrology service is promising despite the financial constraints and social circumstances of the families

OP29 Nephrology 03

CLINICO-PATHOLOGICAL ANALYSIS OF KIDNEY DISAESES IN CHILDREN: A RETROSPECTIVE, SINGLE CENTRE STUDY.

Bassam Saeed
Paediatric Nephrologist, Paediatric Nephrology Department, Surgical Kidney Hospital, Ibn-Alnafis Medical Complex, Damascus, Syria

Background: The aim of the present study was to assess the correlation of renal histopathological findings with clinical diagnosis in order to achieve a useful data on when and how a renal biopsy could be a useful tool for the management of a child with kidney disease; and also, to recognize the pattern of kidney diseases in our pediatric population.

Methods: A total of 95 native and allograft renal biopsies performed on children who presented to the Surgical Kidney Hospital (a tertiary care hospital in Damascus) during a period of 3 years (between January 2003 and December 2005), were retrospectively reviewed and categorized.

Results: Nephrotic syndrome alone accounted for 52% of all cases, followed by hematuria in 21%, mild to moderate renal impairment including allograft dysfunction in 15%, nephritic syndrome in 10%, and Henoch-Schonlein purpura (HSP) with severe renal involvement in 2%.The most common histological lesion was minimal change disease (29%). Focal and segmental glomerulosclerosis was the second most common lesion (13%) followed by diffuse mesangial glomerulonephritis (11%), Membrano-proliferative glomerulonephritis (9%), post-infectious glomerulo-nephritis (5%), IgA nephropathy (4%), primary membranous glomerulonehritis (3%), congenital nephrotic syndrome of Finnish type (2%), Alport syndrome (2%), interstitial nephritis (2%), nephronophthisis (2%), HSP (2%), acute rejection (2%), chronic rejection (2%), nephrocalcinosis (1%), crescentic glomerulonephritis of undetermined origin (1%), and lastly, 5% were completely within normal limits. Familial and inherited diseases were encountered in 15%. Histopathologic diagnosis was mostly useful in nephrotic cases where it largely contributed in the management and in defining the prognosis as well. While in hematuria cases, the usefulness of the histological findings in terms of therapeutic and/or prognostic point of view was definitely less. One of the reasons for that in our series is perhaps because we still do not have facilities to perform electron microscopic evaluation of the renal tissue. However, controversy about the usefulness of renal biopsy in such cases is still there.

Conclusion: this study provides an important data on the pattern of paediatric renal diseases in our centre and highlights the usefulness of histological findings in guiding the therapeutic plan especially for nephrotic children. However, more facilities should be available to achieve more accurate and comprehensive histological findings with a better impact on the clinical practice

OP30 Nephrology 04

PATTERN OF GLOMERULAR DISEASES IN SUDANESE CHILDREN: A CLINICOPATHOLOGICAL STUDY

Mohamed B. Abdelraheem, El-Tigani M.A.Ali, Reem M. Mohamed,
Einas G.Hassan, Maysoon A.M.Ali, Nada M.Hussain
Soba University Hospital, Paediatric Nephrology Unit, University of Khartoum, Sudan

Introduction: Glomerular diseases are the most common cause of chronic renal failure and/or ESRD in many countries. The pattern of glomerular diseases (GN) varies from country to country, it is believed that it is more common in tropical countries of the 3rd world than developed countries and this is largely attributed to infections, malnutrition or genetic predisposition. Glomerular diseases in adult Sudanese patients have been reported but no previous report from Sudanese children.

Aim: The aim of the study is to describe the pattern of glomerular diseases in Sudanese children from a clinicopathological perspective.

Patients and Methods: We retrospectively reviewed the clinical records of 261 children from the Pediatric Nephrology Unit - Soba University Hospital and Dr. Salma Dialysis and Kidney Transplantation Centre during the period from 2001 to 2005.

Results: Two hundred and sixty one children were studied; mean age was 8.73 yrs (Range 2 month - 16 yrs). There were 157 male (60.2%). The most common presentation was nephrotic syndrome 179 (68.3%). Of the 261 children renal biopsy was done in 145 (55.3%). The most common glomerular disease was Minimal Change disease 85 (32.5%), followed by Post- infectious GN (24.5%), Focal segmental glomerulosclerosis 35 (13.4%), Mesangiocapillary GN 34 (13%) and Mesangioproliferative GN 21(8%). SLE accounted for 11(4.1%) while IgA nephropathy, Membranous GN and Alport syndrome where seen only in (0.4 %) each. HBsAg was positive in 8 patients. At the end of the study 161 (61.6%) improved, 61(23.3%) remained on follow up, 17 (6.5%) lost from follow up, 12 (4.6%) progressed to chronic renal failure and 10 (3.8%) died.

Conclusion: The pattern of GN in our cohort of patients were compared to other parts of the world with an unexpected high prevalence of Post-infectious GN.

OP31 **Nephrology 05**

MALNUTRITION IN CHILDREN WITH CHRONIC RENAL FAILURE

*Husein Abdo(MD),** Salah A Ibrahim(FRCP, FRCPCH, FACCP, MD)
*Khartoum teaching hospital, Khartoum, Sudan
**Dept. of Paediatrics, Faculty of Medicine, University of Khartoum,Khartoum, Sudan

Introduction: Malnutrition is one of the most important complications of CRF, it may lead to increased morbidity and mortality in children; and delay in physiological sexual and neurocognitive development.

Aim: The aim of the study was to determine the prevalence of malnutrition and study the possible risk factors for development of malnutrition in children with CRF.

Methods: This is across sectional, hospital based study which was carried out during the period from Dec. 2005 to June 2006 at four different specialized pediatrics renal centers. A total of 65 patients with CRF were studied .The mean age was 13.3 yrs (range 3.5 – 18 years) male patients were (n = 45) 69.2%. Eleven patients (16.9%) were diagnosed as CRF and 54 (83.1%) were ESRD. The cause of renal failure was undetermined in the majority of patients (n = 37) (56.9%) and most patients 51(78.5%) were on HD.
Results: The prevalence of malnutrition in the study group was found to be (67.7%).

The mean weight for age and height for age Z-scores distribution for patients with CRF were - 2.5 SD, - 2.8 SD respectively, and the larger number of children (n = 24) (36.9%) were moderately malnourished, 20 (30.8%) were severely malnourished and 16 (24%) were normal .This result was obtained by using Z-score height for age SD; while nearly the same result was obtained by using z-score weight for age SD.

Conclusion: malnutrition was found to be a common complication of CRF. The severity of malnutrition increased significantly with duration of dialysis ($P < 0.017$). Malnutrition was more associated with haemodialysis ($P < 0.05$) rather than peritoneal dialysis; further detailed studies were needed.

ACUTE CHEST SYNDROME IN SICKLE CELL DISEASE

Zakaria M. Al Hawsawi
Consultant Paediatrician & Paediatric Haematologist / Oncologist Madina Munawara, K.S.A

Introduction: Acute chest syndrome is defined as a new pulmonary infiltrate and some combination of fever, chest pain and symptoms and signs of pulmonary disease such as cough, dyspnoea and tachypnea. It is one of the most frequent complications of patients with sickle cell disease, causing significant morbidity and mortality. The frequency is variable reaching up to 45%. It accounts for more than 90% of hospital admission, and cause approximately 25% of death in patients with SCD .Despite its substantial morbidity and mortality, relatively little is known on the aetiology and pathophysiology. Some cases are clearly due to infection, other causes include hypoventilation after opoid analgesics, splinting due to rib infarction and excessive intravenous hydration and fat embolism. The risk factors for development of ACS include homozygous sickle cell anaemia (HbSS), younger age group and lower haemoglobin F and high steady state white blood cell count.

Aim: This study was carried out to demonstrate the clinical experience on Acute Chest syndrome (ACS) in children with sickle (SCD) in Madinah Region, North-western province of Kingdom of Arabia.

Method: This is a retrospective study carried out at Madina Maternity & children's Hospital (MMCH), Madina, KSA between January 1996 and January 2000. All paediatric patients (12 years) with SCD and developed ASC within the study period were included and case notes were reviewed. The following variable were studied: age at onset, sex, nationality, clinical presentation, haematological data at presentation, steady state haematological data, radiological finding on chest x-ray , management undertaken , recurrence and mortality .

Results: A total number of SCD patients registered and followed at MMCH during the study period were 120 of which 12 patients had ASC, which accounted for a prevalence of 10%. All patients had HbSS disease. The age range was between 2-13 years. They were 8 males and 4 females with a male to female ratio of 2:1. Nine were Saudis and 3 were non-Saudis. Eleven (92%) presented with fever, chest pain occurred in 6 (50%), 10 (83%) were associated painful vaso-occlusive crisis and hypoxemia occurred in 2 (17%). The ACS was recognized on presentation in 9 patients (75%) and was recognized later after admission in 3 (25%). The leukocyte count was more than 15.000/mm3 in patients (67%), and Hb was less than 6g/dl in 8 (67%). The chest x-ray showed right lower lobe involvement in 6 patients (50%), bilateral involvement in 4 (33%) and left lower lobe in 2 (17%). Bacterial cause was identified in 2 patients (17%) and undetermined in 10 (83%). Bronchial asthma was a precipitating factor in 5 (42%), patients. Eight patients (67%) received simple blood transfusion, recurrence occurred in 2 (17%), and there was no mortality.

Conclusion: The majority of ASC in our region is due to undetermined origin presumably secondary to rib infarction, atelectasis or fat embolism and further prospective study is required to confirm this possibility, we also conclude that bronchial asthma is an important precipitating factor for occurrence of ACS in SCD. Finally, we also recommend simple BT to be part of the management of ACS in children.

OP33 **Haematology/oncology 02**

RELATIONSHIP OF THE SICKLE CELL GENE TO THE ETHNIC AND GEOGRAPHIC GROUPS POPULATING THE SUDAN

Bekhieta Atalla, Abdelrahim O Mohamed, fathya M K Bashir, Fatima E Ahmed, Ahmed M El Hassan, gafar Ibnauf, Weiying Jiang, Luigi L cavalla-Sforaz, Zein A Karrar, Muntasir E Ibrahim
Dept of Paediatrics, Faculty of medicine, University of Khartoum, Khartoum, Sudan

Introduction: The presence of geographical pattern in the distribution of the sickle cell gene(S gene) and its association with malaria is well documented.
Methods: To study the distribution of the S gene among various ethnic and linguistic groups in the Sudan we analyzed a hospital-based sample of 189 sickle cell anemia (SCA) patients who reported to Khartoum Teaching Hospital between June 1996 and march 2000 and 118 controls with other complaints, against their ethnic and linguistic affiliations and geographic origin. Electrophoresis for hemoglobin S and sickling tests were carried out on all patients and controls as a prerequisite for inclusion.
Results: The majority of patients (93.7%) belonged to families of single ethnic decent, including the high degree of within-group marriages and thus the higher risk of augmenting the gene. SCA was found to be predominant among the Afro-Asiatic-speaking groups (68.4%) including nomadic groups of Aran and non-Arab descent that migrated to the Sudan in various historical epochs. Those patients clustered in western Sudan (Kordofan and Darfur) from where 73% of all the cases originate. The proportion of patients reporting from other geographic areas like the south (3.1%) which is primarily inhabited by Nilo-Saharan-speaking groups (19% of the whole sample) who populated the country in previous times, is disproportionate to their total population in the country ($x2=71.6$; $p=0.0001$). Analysis of the haplotypes associated with the S gene indicated that the most abundant haplotypes are the Cameroon, Benin, Bantu and Senegal haplotypes, respectively. No relationship was found between haplotypes and the various hematological parameters in the sub-sample analyzed for such association.
Discussion: These results provide an insight into the distribution of the sickle cellgene in the Sudan, and highlight the strong link of the middle Nile Valley with West Africa through the open plateau of the Sahel and the nomadic cattle herders and also probably the relatively young age of the S gene.

OP34 **Haematology/oncology 03**

EFFECTS OF ASPIRIN ON THE SEVERITY OF SICKLE CELL ANAEMIA: AN OPEN NON-RANDOMOZED CLINICAL TRIAL

***Nawal Eltayeb,** **Maria MH Satti*, Eltayeb El Wasila, Abdelrahim O. Mohamed
*Faculty of Medicine, University of El Imam El Mahdi, Kosti, Sudan and
** Faculty of Medicine, University of Khartoum, Khartoum, Sudan

Introduction: Sickle cell anaemia is a haemoglobinopathy due to a single point mutation in the DNA leading to a heterozygous or homozygous inheritance. The heterozygotes are essentially healthy individuals while the homozygotes suffer from hemolytic anemia with different complications. The natural history of the disease shows that the clinical history varies widely from severe disease characterized by multiple painful crises and other complications involving almost every organ to a mild disease that hardly affect the patients' activities. Different factors have been identified to be responsible for the heterogeneity in the presentation such as persistence of fetal hemoglobin, alfa thalasemia co-inherited with sickle cell, platelet activities, von Willebrand factor (vWF) levels, factor VIII and factor VII levels. Objectives: This study was designed on the hypothesis that increased levels of vWF and platelet activation are responsible for the severe cases of sickle cell anaemia. The objective was to study the effect of aspirin administration on these factors and hence the severity of the disease.

Materials and methods: Forty patients with sickle cell anaemia have been studied after informed consent of the guardian in Kosti teaching hospital in the White Nile State. Thirteen patients fulfilled the criterion of severe disease which is history of three or more painful crises per year. Preliminary clinical examination and baseline investigations of hemoglobin levels, total white cell counts, platelet counts and vWF concentration were performed. Patients with severe disease received a daily single dose of 75 mg aspirin and followed up every 4 weeks for one year. Investigations were repeated every three months.

Results: seven patients completed more than 9 months of follow up. None of these patients suffered painful crises. However, two patient developed hemolytic crises and needed transfusion. This is a preliminary presentation of the results.

OP35 **Haematology/oncology 04**

WORKUP OF AN IMMUNODEFICIENT CHILD

Amel Hassan
Great Ormond Street Hospital, London, UK

OP36 **Haematology/oncology 05**

PATTERN OF PAEIATRIC MALIGNANCY PRESTING TO RADIOIOSOTOPE CENTRE, KHARTOUM 2004 -4007

M. A. Alkhatib

PO37 **Haematology/oncology 06**

EVALUATION OF THE USE OF ERYTHROPOIETIN IN THE MANAGEMENT OF ANEMIA IN SUDANESE CHILDREN WITH CHRONIC RENAL FAILURE

Ibrahim A G.{ MD pediatric & child health}, Karrar K(FRCP FRCPCH , MRCP (UK), Kordofani A D.C.P , FRCpath (UK)}
Gaffer Ibn Oaf Children hospital, Khartoum, Sudan.

Introduction: Anaemia Management in CRF is essential and EPO use is mandatory, yet since its introduction to Sudanese children no studies have been done for evaluation and monitoring.

Method: This was a prospective hospital based study conducted in the renal centers of Khartoum state in the period from June 2004 to January 2005, with the aim of evaluating the effect of erythropoietin in the management of anemia in chronic renal failure. Children up to the age of 18 years with chronic renal failure and anaemia, whether on renal replacement therapy or conservative medical treatment were chosen. A total coverage sample of 53 patients was divided into two groups: the group of patients classified as ESRD, and the second group labeled as Pre – ESRD based on their glomerular filtration rates. Data was collected using a questionnaire composed of relevant history, examination and investigations, and then follow up for a period of three months; thereafter they were reassessed for changes in their status.

Results: The mean age of the study group was found to be in the range of 1.5 -18 years, with a mode of 13. Male patients constituted 70% of the study group and the 84.9% of the children were of low socioeconomic status. Erythropoietin was used by 29(54.7%) patients, 13(44.8%) received it on regular basis during the study period. The Total number of patients who came for follow up after three months were thirty nine patients; 35(71.4%) ESRD and only four (11.4%) patients were pre-ESRD. ESRD children who received EPO were 25(73.3%), and showed a mean Hb of 7.748g/dl+ 2.2SDat start of study, and 7.628 g/dl+1.3SD (P=0.658).Children in the study group failed to show the expected increase in haemoglobin, yet the rate of decline of haemoglobin in EPO users was significantly less than that in EPO non-users (1.54% Vs 5.57%). Erythropoietin was not adjusted according to each patient's requirement; the dose was 100 U/Kg weekly. It was concluded that EPO treatment did not improve the anaemia of the children studied yet it

played an important role in preserving the haemoglobins of patients who used it. It was also found that EPO among three other factors proved to have a highly significant effect in reducing the mortality of patients.

OP38 **Haematology/oncology 07**

IRON STATUS IN SEVERE PROTEIN ENERGY MALNUTRITION IN KHARTOUM STATE

***Magda Ishag,** **Zein A.Karrar FRCP, FRCPCH, MRCP (UK)
*Khartoum Teaching hospital, Khartoum, Sudan
**Department of Paediatrics, Faculty of Medicine, University of Khartoum, Khartoum, Sudan

Methods: This is a descriptive, cross-sectional, hospital-based study to assess the iron status in children with protein energy malnutrition (PEM) compared to normal controls. The study was conducted in Gaffer Ibn Oaf Children Specialized Hospital, Khartoum Teaching hospital and Omdurman Children Teaching Hospital from Sep.2006 to Feb. 2007. The study tools included: interview and clinical examination using structured questionnaire and laboratory investigations focused on Haematology and iron status parameters. One hundred and four children were included, out of whom 74 had severe PEM, 34 with marasmus, 26 with kwashiorkor and 14 with marasmic-kwashiorkor and 30 controls.

Results: The study showed that, children with PEM had significantly lower levels of Hb compared to controls (P value<0.05). All children less than 2 years old were anaemic in the study group; also all females in the study were anaemic compared to 79.2% of males. Low levels of Hb were found in all children who presented with pallor, nail changes, smooth tongue or jaundice. Iron studies in children with PEM showed different correlation: there were 86.5% of children with normal or high levels of serum ferritin, normal or low levels of TIBC in 62.2%, while low serum iron was found in 91.8% and low Hb level in 86.5%.

Recommendations: iron status of children with PEM must be evaluated by methods which are not influenced by infection or inflammatory processes and hypoproteinaemia such as transferring receptors or percentage of hypochromic red cells. Reference values of iron status parameters in our population should be studied.

OP39 **Nestle Symposium**

PROTEIN REQUIT\REMENT IN INFANCY

Aziz koleilat
Paediatric Department, Director of Pediatric Residency Program.
Makassed University General Hospital, Beirut, Lebanon.

OP40 **Nestle Symposium**

WHO CODE TO MILK SUBSTITUTE PROMOTION

Ahmed S Younis
Egyptian Paediatric Society, Cairo, Egypt.

OP41 **Nestle Symposium**

NESTLE NUTRIYION INSTITUTEWHO

Ibrahim Ismail
Paediatrician, Medical Advisor – Middle East and Egypt

PIV **Plenary 04**

MEDICAL EDUCATION IN AFRICA AND SOME ARAB COUNTRIES

Mohamed Ibrahim Ali Omer, FRCP, FRCPCH, MD
Professor of Child Health, Department of Clinical Medical Sciences,
Faculty of Medical Sciences, The University of the West Indies, St Augustine, Trinidad, WI

Medical educationists in The Arab Countries and Africa are challenged to identify their role in the direction which medical education has to take to meet the future needs of their countries.
Training of doctors has to be reoriented in such a way that they find themselves well equipped to lead the way towards improving the health situation and effectively participating in uplifting the general condition of the people.
This can be achieved by medical schools having control of their duties and functions and using these powers to train doctors who are community oriented, able to identify clinical and epidemiological problems and find suitable solutions. Doctors of the future should be comfortable working in the community with other members of the health team and confident in addressing all health-related matters in the community. During their formative years in medical school they should acquire the skills to continue self education.
This presentation discusses some of the steps to be implemented by medical schools to achieve these goals, taking in consideration the present situation in their respective countries.

PV **Plenary 05**

ETHICAL DECISION MAKING IN THE NEWBORN PERIOD

Ryan CA, FRCP, FRCPCH.
Cork University Maternity Hospital, and Department of Paediatrics & Child Health,
University College Cork, Ireland

Life, if good for the person, is good. But, life is not always good

The evolution of aggressive treatment of the newborn infant over the past 35 years has been associated with a dramatic reduction in mortality for virtually all major disease categories in the newborn period. However, such care is costly; often causes suffering; and sometimes can result in considerable long-term morbidity. Therefore, decisions to continue or discontinue aggressive treatment are an integral part of clinical practice in modern NICUs.

Learning objectives:

At the end of this presentation you will able to:

- To identify the common ethical problems in the newborn period:
- To understand the major ethical principals (*Beneficence, Nonmaleficience, Autonomy, Justice, Veracity)*
- To discuss some of the following issues
    - *Who is the decision-maker regarding the nature of medical care administered to a newborn infant?*
    - *Is choosing death for a child justified?*
    - *What responsibility has the physician as an advocate for the child?*
    - *What level of uncertainty is necessary to allow a child to die?*
    - *Does the possibility of a good outcome, however slim, obligate physicians to advocate for continued treatment?*

To use a decision making framework to:

- Identify the health problem
- Identify the ethical problem
- State who is involved in the decision
- Identify your role
- Consider as many possible alternatives as possible
- Consider long- and short-term consequences of each alternative decision
- Reach your decision
- Consider how the decision fits into your general philosophy of patient care
- Follow the results of your decision
- Use this information in making future decisions

PVI **Plenary 06**

PAEDIATRIC ENDOCRINOLOGY IN SUDAN: PAST, PRESENT AND FUTURE

Mohamed Ahmed Abdullah FRCP, FRCPCH, DCH, DTCH
Professor of Paediatrics and Endocrinology, Dept. of Paediatrics, Faculty of Medicine, University of Khartoum, Khartoum, Sudan

In modern medicine Paediatrics was recognized as a separate specialty between 1850-1880. since then a lot of advances were made between 1900-1950 particularly in the field of nutrition, genetics and metabolism. The first paediatric subspecialty clinics, including endocrinology were established at John Hopkins in 1936. Since then the importance of these specialties was appreciated worldwide for service, training and research. There are now more than twenty subspecialties in paediatrics.

Though the first medical school started in Sudan in 1924, paediatric continued to be taught as part of medicine and the first separate department of paediatrics was established in 1968. Sudanese paediatricians were mostly trained abroad till 1976 when a local medical board for higher education was established and the first batch of paediatricians graduated in 1980. Up-to-date about paediatricians were trained locally, but still many candidates left on their own to be trained in other countries such as U.K, USA and the gulf. Though some of the initial post-graduates were sent abroad to get subspecialty training, for some or other reason this program was discontinued. This has greatly affected the number of paediatricians with subspecialty training in Sudan, and even most of those who went on their own are still staying abroad. Therefore, paediatric subspecialty services in Sudan are scanty and embryonic.

In this paper we present an example with a paediatric endocrinology clinic which was established two years ago at Gaffer Ibn Oaf Children Specialized Teaching Hospital and a diabetic clinic at Jabir Abu Izz Childhood diabetic centre to show the pattern of cases encountered in Sudan, the available investigative and treatment facilities and to reflect the impact it has made on services, training and research as well as to show the difficulties faced by us. The clinic is run by a paediatric endocrinologist and a consultant under training in addition to paediatric consultants with interest in diabetes. We have a full paediatric diabetes team including diabetes educators, social workers, psychologist, dieticians, pharmacists and others. Most of the investigative facilities are available with some rare tests being sent abroad to Bioscientia. Treatment is almost free including insulin and growth hormone. More than 300 endocrine cases and 450 diabetics are cared for. The commonest problems are diabetes, short stature, thyroid disorders and ambiguous genitalia. Many endocrine cases are reported for the first time from Sudan. We will project the experience of two societies, The Sudan childhood Diabetes Society and Sudan Scientific Group for Disorders of Sex Development. In addition to service the clinic member provide training for under and post-graduate candidates as well as paramedical staff. Research is encouraged and many projects have been executed.

We believe that more subspecialty service should be developed locally and young staff should be trained in these areas through gradual establishment of fellowship programs, then they should be sent abroad and there are many International bodies that can help in that. In addition improvement of local facilities might encourage our Sudanese paediatricians who are currently working abroad to come back.

OP42 **Gastroenterology 01**

PROBIOTICS AS MODULATORS IN ATOPY

Aziz koleilat
Paediatric Department, Director of Pediatric Residency Program.
Makassed University General Hospital, Beirut, Lebanon

In theory, increased levels of Probiotics may induce a 'barrier' influence against common pathogens and antigens by activating macrophages,altering cytokines,increasing natural killer cell activity,and/or increasing levels of immunoglobulins Vitini, Et al (2000) *Biocell* ,Isoulor 2002. Recognition of *in vivo* and immunomodulatory roles for probiotic bacteria are now promoting opportunities for use of these microorganisms in many fields concerning inflammation ,infection and atopy. The survival issues of Probiotics is associated with their establishment in the competitive gut ecosystem Since the generation of immunophysiologic regulation in the gut depends on the establishment of indigenous micro flora and the therapeutic interventions based on the consumption of cultures of beneficial live micro organisms that act as Probiotics. Among the possible mechanisms of Probiotics therapy is promotion of a nonimmunologic gut defence barrier, which includes the normalization of increased intestinal permeability and altered gut micro ecology. The role and effect of probiotics in infant feeding, on the mucosal permeability & microbial flora composition and in turn on the stabilization of Th1/Th2 & IgE production has been tested.Another possible mechanism of Probiotics therapy is improvement of the intestine's immunologic barrier, particularly through intestinal immunoglobulin A responses and alleviation of intestinal inflammatory responses, which produce a gut-stabilizing effect. Many Probiotics effects are mediated through immune regulation, particularly through balance control of proinflammatory and anti-inflammatory cytokines.Probiotics can be used as innovative tools to alleviate intestinal inflammation, normalize gut mucosal dysfunction, and down-regulate hypersensitivity reactions. There are differences which exist in the immunomodulatory effects of candidate Probiotics bacteria. Specific immunomodulatory properties of Probiotics bacteria should be characterized when developing clinical applications for extended target population.

OP43 **Gastrenterology 02**

CRIGLER-NAJJAR SYNDROME-AN UPDATE ON DIAGNOSIS AND TREATMENT

Hisham Nazer , FRCP, FRCPCH
Consultant Pediatric Gastroenterologist , Professor of Pediatrics
President of the Jordanian Group of Pediatric Gastroenterology & Nutrition, Amman, Jordan

Crigler-Najjar Syndrome (CNS) is a congenital familial disorder associated with high level of unconjugated bilirubin due to hepatic dysfunction of UDP-glucuronosyle transferase activity. The aim of this presentation is to highlight the needs for increased awareness of such a potentially serious condition to ensure early diagnosis and appropriate management.

A favorable Progress has been made to enable early diagnosis and treatment of this rare disorder. The diagnosis needs to be confirmed by deficiency or almost complete absence of the enzyme UDPGT activity in the liver. Newly developed probes have demonstrated their potential usefulness in carrier detection , prenatal and pre-symptomatic diagnosis. This is an important diagnostic tool for countries like ours where a high rate of consanguineous marriage prevails.

Response to treatment varies according to type of CNS. Recognized forms of therapy especially in CNS 1 include phenobarbitone, phototherapy, exchange transfusion, plasmapheresis, cholestyramine and ursodeoxycholic acid .Oral calcium supplementation makes phototherapy more efficient .Gene therapy offers the greatest potential for cure of patients with CNS. The locus of UGT 1A1 gene is at chromosome 2q37. The prognosis of affected patients has been favorably transformed through the application of liver segment transplant. Auxillary, living related liver transplantation has made early management possible to save affected patients long term phototherapy.

Hepatocytes transfusion has been reported to decrease the need for phototherapy and to increase the activity of UGT to 5.5% of normal. In the year 2005, new advances in gene therapy were established in Gunn rats, an animal model of CNS.Transplantation of hepatocytes derived from Stem cells could provide alternative source of cells in the future. It is anticipated that with early and appropriate treatment, prolonged survival of patients with CNS free of neurological deficit is possible.

OP44 **Gastroenterology 03**

MANAGEMENT OF CHILDREN PRESENTING WITH HEMATEMESIS TO JAFFER IBN AUF CHILDREN HOSPITAL: A THREE YEARS EXPERIENCE

Omayma Mohy ElDin Sabir, DCH, DCCH, FRCP, FRCPH
Consultant Paediatric Gastroenterologist, JIA Children Hospital
Associate Professor, Al Nileen University, Khartoum, Sudan

Background: Hematemesis in children is a serious emergency, which needs to be dealt with quickly and efficiently. Since the use of the fibroptic endoscopy in the diagnosis and management of the upper gastro-intestinal bleeding in children, diagnosis and treatment have improved dramatically.

Objective: This communication describes the causes, management and outcome of the children who presented with upper GI bleeding to our unit at JIA children hospital between January 2005 and July 2007.

Subjects & Methods: Of the 3000 children who attended our GI outpatient clinic during the study period, 100 (75 boys & 25 girls) presented with upper GI bleeding. Their age ranged between 4 month and 16 years. All children had detailed history, clinical examination, relevant blood tests, abdominal sonography and liver biopsies when indicated. All children had upper GI endoscopy and therapeutic endoscopy when required within 24 to 72 hour after stabilising. **Pre endoscopic preparation:** All patients were fasting, at least 4 hours for children who are less than 2 years, and 6 hours for older children. They had IV Midazolam (0.1mg/kg) & IV Pethidine (1mg/kg) if therapeutic intervention was needed. Fresh frozen plasma, blood and vitamin K were given if they have abnormal coagulation tests. Oxygen was given during the procedure via nasal prongs, and the patients were monitored by pulse oximeter

Results: Only small group (3.3%) of the children who presented to our GI unit during the study period had hematemesis. The most common cause was oesophageal varices accounting for 75% of cases and the rest included hiatus hernia, oesophagitis, gastritis, duedenitis and duodenal ulcer and Mallory Weiss tear. Oesophageal varices due to portal hypertension were mainly due to portal vein thrombosis (60%), parynchemal Liver Diseases (20%), and peri-portal fibrosis (5%). The type of therapy those children received were mainly Band ligations, sclerotherapy, Propranolol, PBI, Glypressin, H2 Blockers, and Helicobacter eradication therapy. Only 2 children died and 8 children rebled after the first session of sclerotherapy, but none rebled after band ligations. 25 children cleared their varices completely and the rest still receiving treatment. Children who bled of other causes, not varices, completely recovered with medical treatment apart from 2 children with large Hiatus hernia, GOR and severe oesophagitis who needed fundiplication surgery.

Conclusion: Hematemesis in Sudanese children is mainly due to PVT, Hiatus hernia with GOR and oesophagitis, and Helicobacter Infections. The use of Band ligations in oesophageal varices in children is quite safe and has a better out come. There was significant morbidity due to chronic liver diseases & helicobacter infection in our study.

INDICATIONS AND OUTCOME OF UPPER AND LOWER GASTROINTESTINAL ENDOSCOPY IN CHILDREN

***Lana Mahir (MD),** **Zein Karrar FRCP, FRCPCH, MRCP(UK), **Hatim Y Mudawi (MRCP)
*Khartoum teaching Hospital, khartoum, Sudan
** Faculty of Medicine, University of Khartoum, Khartoum, Sudan

Methods: A descriptive cross sectional hospital-based study; performed on children up to 18 years old undergoing diagnostic or therapeutic gastrointestinal endoscopy. It included a retrospective analysis of endoscopy records from January 2000 to May 2006, and a prospective part including all children who underwent upper and lower gastrointestinal endoscopy from June to December 2006. The study was conducted in 2 specialized endoscopy centers. In the retrospective part the number of children was 368. Data were retrieved from records and were entered in a structured data sheet. In the prospective part 102 children were enrolled, they underwent interview and physical examination using a preceded questionnaire. Eighty - eight of these children underwent upper gastrointestinal endoscopy (UGE) and 14 underwent lower gastrointestinal endoscopy (LGE).

Results: In the retrospective part UGE was performed more than LGE. Upper gastrointestinal endoscopy was performed equally in males and females (50%), while LGE was, performed more in males (61.5%).The most common age group for both UGE and LGE was > 10 children in (85.7%) and (69.2%) respectively. The most common indications for UGE were abdominal pain (32.9%), exclusion of oesophageal varices (20.8%) andupper GI bleeding (16.1%). The most common indications for LGE were rectal bleeding (66.7%), abdominal mass (7.7%) and bloody diarrhoea (7.7%).The most common endoscopic findings in UGE were oesophageal and/or junctional varices (38.8%)), normal (36.3%) and gastritis and/or gastric erosions (10.2%). The most common endoscopic findings in LGE were polyps (28.8%), normal (19.2%) and haemorrhoids (11.5%). The most common procedure performed in UGE was sclerotherapy (35.8%), while the most common procedure performed in LGE was polypectomy (46.7%).

The results of the prospective part revealed that LIGE done in (86.3%) of the children was performed far more common than LGE done in (13.7).Male were more common to undergo UGE (64.8%) and LGE (57.1%) than females. The most common age group who underwent both LJGE and LGE was > 10 years children in (54.5%) and (57.1%) respectively. The most common indications in children who underwent LIGE were abdominal pain (23%), haematemesis (15%) and scheduled sclerotherapy (14%). while Bloody diarrhoea (21.4%), rectal bleeding (28.6%) and unexplained melaena (14.3%) were the most common indications for LGE. The most common endoscopic findings in those who had UGE were oesophageal varices (27.3%), normal (21.6%) and gastritis (15.6%). The most common endoscopic findings in LGE were normal (35.7%), colitis (29%) and polyps (21.4%). The most common procedure performed during UGE was biopsy (39.3%), while the mostcommon procedure performed during LGE was polypectomy (57.1%).

Conclusion: Over the last 5 years there has been an increase in endoscopies done in children yearly. The main recommendations were that paediatric endoscopy is a safe procedure that needs to be more utilized where indicated. Training of paediatric endoscopist, preventive measures at community level, early detection and treatment of children with Bilharziasis and mass treatment with Prazequantel at community level was also among the main recommendations.

OP46 Gastroenterology 05

EOSINOPHILIC COLITIS AFTER INFANCY

M. A. Elawad[1], S. S. M. Hill[1], V. V. Smith[2], K. K. J. Lindley[1], P. P. J. Milla[1]
[1]Gastroenterology, [2]Histopathology, Great Ormond Street Hospital, LONDON, UK

Introduction: Eosinophilic colitis (EC) is a common problem in infancy. Cow's milk protein intolerance has been identified as the main cause and it responds well to cow's milk exclusion. Most children grow out of it by school age. There is however little known about EC presenting after infancy. The aim of this study was to compare the presentation, histological diagnosis and response to treatment in children with EC presenting during and after infancy.

Methods: From January 1995-December 1996, 20 patients were diagnosed with EC and retrospectively studied. 15 patients were over a year old (group 1)and 5 were under 1 year(group 2). 12/15 of group 1 patients (8 Male,4 Female, median age at presentation 5 years, range from 1.8 – 14.2 years)were followed up for a median of 7.1 years (range 5.3-8.9 years). All 5 group 2 patients (3 male, 2 female, median age 0.3 years range from 0.1-0.8 years) were followed for a median period of 3.1 years (range 1.8-4.2 years). Symptoms at presentation, personal and family history of atopy, immunology were evaluated. Colonic histology was reviewed by an independent histopathologist who was blinded to the clinical symptoms and outcome. EC was histologically graded. Response to dietary intervention, medical treatment and overall outcome were evaluated.

Results: Initial presentation of group 1 patients was with abdominal pain 8/12, diarrhoea 7/12 and bleeding per rectum 6/12. All group 2 patients presented with rectal bleeding. IgG,A,M,E and specific IgE antibodies were similar in both groups. In both groups a mixed infiltrate with both sub-epithelial and and pericryptal eosinophilia was the commonest finding. In group 1, 1/12 had a pericryptal eosinophilic infiltrate only and 4/12 had a sub-epithelial eosinophilic infiltrate. There was no correlation between presentation, outcome and the site of infiltrate. 4/5 patients from group 2 compared to 1/12 patient from group 1 improved on dietary treatment alone (P= 0.004). 9/12 patients needed 5-aminosalycylates, 4/12 steroids and 2/12 azathioprine. 5/12 patients have their symptoms under control on diet and treatment, 3/12 are off diet and treatment, while 2 are well on diet alone.

Conclusion: EC may be more common in children after infancy than usually suspected. The presentation and response to diet are different in children presenting during and after infancy. It has a wide range of presentation, and can run a prolonged course with remission and relapse and may need immunosuppressive treatment. Grading the distribution of the eosinophils within the colonic mucosa may be a helpful tool in understanding the nature of the infiltrate and a guide to subsequent treatment. Since the number of subjects studied is small a larger study is required to clarify these patients.

OP47 Gastroenterology 06

FIVE YEARS EXPERIENCE IN CELIAC DISEASE CLINIC IN IBN SINA HOSPITAL, KHARTOUM, SUDAN

Ali Arabi, MBBS, CMD
Department of Child Health, Faculty of Medicine, University of Khartoum, Sudan

Introduction: Celiac disease is not uncommon in Sudan in both children and adults although it is traditionally considered a rare condition by many physicians.

Aim: To share our experience in the celiac disease clinic that has been setup in Ibn Sina Hospital for the last 5 years.

Method: The clinic team consists of a physician, pediatrician, endoscopist, histopathologist, dietitian, psychiatrist and a social worker. Patients are referred from all over the country. Detailed questionnaire, thorough clinical examination and anthropometric measurements are performed for every new case. The

investigation done included anti-tissue transglutaminase (tTGA), IgA anti-endomysium antibodies (AEA), antglidin and small bowel biopsy. Follow up is done after 15 days, then every 3 months for confirmed cases using histopathology and serology. The management included a) provision of verbal and written dietary guidelines b) correction of anemia and c) psychosocial and home counseling.

Results: Out of 500 cases suspected, 130 proved to be serologically and histopathologicaly celiac disease. Antitissue transglutaminase is the most that correlates well with histopatholgy (sensitivity 80 %). The outcome is excellent in 55% of the cases and is staggering in the remainder due to lack of compliance. Socially and culturally, mothers face difficulty in keeping children in strict gluten free diet.

OP48 **Gastroenterology 07**

GASTROESOPHYGEAL REFLUX , ASTHMA & COUGH

Aziz koleilat
Pediatric Department, Director of pediatric residency program.
Makassed University General Hospital, Beirut, Lebanon

Regurgitation

- Regurgitation is defined as a sudden and effortless return of small volumes of gastric and/or esophageal content into the mouth.
- Regurgitation it is self-limiting in the majority of patients by the beginning of the second year of life.

Reflux

- Involuntary passage of gastric content into the esophagus . called gastro esophageal reflux (GER).
- Depending where the reflux material may reach there are lot of complications , from otitis media to asthma and chronic cough , affecting the respiratory system

GERD

Asthma and chronic cough are *One* of the complications of GE REFLUX, more or less is the intrinsic type...
Asthma prevalence is increasing in industrialized countries and silent asthma is becoming more recognized.

- 50-80% of all asthmatics have reflux
  60-80% in adult asthmatics population and .50-60%in chidern asthmatics.
  57%. The incidence of symptomatic GERD in patients with asthma
  40% of patients with asthma have evidence of esophagitis
  23% of asthmatics have **("silent reflux")**

The mechanism and the evolution and development of asthma related to reflux is discussed.
Chronic cough (cough duration greater than 3 weeks) is one of the most common clinical presentations in primary care practice. GERD, along with postnasal drip and asthma, is 1 of the 3 most common causes of chronic cough in all age groups. More than 1 etiologic factor may be the cause of chronic cough in many patients. Similar to asthma, a cause-and-effect association is often difficult to establish because chronic cough can induce GERD as well as be caused by it. Cough may be the sole manifestation of GERD in more than 50% of patients, with many denying symptoms of heartburn or regurgitation. GERD should be suspected in patients with cough whose symptoms have been chronic.

OP49 **Metabolic/Endocrine 01**

NEONATAL SCREENING EXPERIENCE IN THE KINGDOM OF SAUDI ARABIA: SUCCESS AND OBSTACLES.

Zuhair A. Rahbeeni, MD, Mohamed S. Rashed, PhD,
King Faisal Specialist Hospital and Research Centre, K.S.A

Introduction: Healthcare providers especially Ministries of Health in the world should provide the healthcare from diagnosis till treatment and prevention of diseases for every resident. However, limitations of resources make the preventive strategies are the best to target in many parts of the world. Neonatal screening program proved without doubt that it is one of the best means for healthy children and community. In addition, it decreases the handicapped by early treatment. However the neonatal screening program should not be a test but a complete program.
Method: Blood samples were extracted from neonates during the first 3 days of life to be sent to King Faisal Specialist Hospital and Research Centre with biographic data including age, sex, weight, etc. The research involved more than 24 hospitals in the Kingdom.
Inclusive Dates: The period of research is from 20 August 2005 to 30 April 2007
Result: We screened 84,226 samples and there was one neonate affected among 732 neonates with one of the 15 disorders that we screened (115 positive neonates).
Discussion: This study showed beyond doubt the high incidence of Genetic disorders including inherited metabolic diseases (IMDs) in the Kingdom (and Arab worlds) if compared with Western Countries.
Conclusion: This high incidence of IMDs make Neonatal Screening program in the Kingdom (and Arab Countries) necessary if the program is taking completely from diagnosis till treatment and follow up including Genetic Counselling in order to prevent these disorders in the future.

OP50 **Metabolic/Endocrine 02**

NEONATAL HYPOTHYROIDISM SCREENING PROGRAM: THE MADINA REGION EXPERIENCE, KSA

Mohamed S. Al Moghamsi
Consultant Paediatric Endocrinologist, Madina Maternity and Children's Hospital
Madina Munawara, KSA

Screening for metabolic disorders has been established as an essential service for children in developed countries. The last effectiveness studies were encouraging to maintain and even to expand these services. To establish the screening for congenital hypothyroidism (SCH) in Saudi Arabia almost 10 years after developed countries, many hurdles faced the program, first the policy maker in the MOH required local scientific experience to convince them. In 1987 MOH started the National SCH .To establish an effective efficient program, many problems had to be solved like the funding, man power, technical, supply of kits, transport and the logistics for the management of the cases in the earliest possible time. It took three years to establish a full service with 90% coverage, but to maintain the service after it proved its effectiveness, was rather challenging because many problems started to appear in maintaining the provision of kits, laboratory technicians and the chain for transportation. The reasons were primarily due to administration in addition to changes in the strategies and policy makers in the MOH, as well as budget and priorities for prevention and curative medicine.
In 1990 Madina Region as part of the national program in KSA started screening for congenital hypothyroidism in Madina Maternity and Children's Hospital during the last 15 years from Sep. 1990 till Sep. 2006. 346000 newborns were screened by TSH enzymatic essay utilizing cord blood. 81 were diagnosed as primary congenital hypothyroidism. This gives the incidence rate in Madina region as 1:4300 which is in agreement with internationally accepted incidence of 1: 3000-5000 live births. Active participation of medical staff in addition to general public awareness are essential for successful screening program and effective early treatment.

OP51 **Metabolic/Endocrine 03**

A HIGH DIAGNOSTIC YEILD IN CHILDREN ATTENDING A METABOLIC CENTRE WITH DEVELOPMENTAL DELAY

Awadalla A, Treacy E., Monavari A, Crushell E, Harty S.
National Centre for Inherited Metabolic Disorders, Children's University Hospital, Temple St, Dublin, Ireland

Aims: Inborn errors of metabolism (IEM) are reported to be a rare cause (1-5%) (Shevell et al) of developmental delay. The aims are to determine the aetiological yield of metabolic investigation in children referred to a tertiary metabolic service where developmental delay was a primary feature, and to determine the variables that make achieving a diagnosis more likely.

Methods: Cases were identified retrospectively from the database at the National Centre for Inborn Errors of Metabolism over a period of 3 years (Jan 2004 –Dec 2006). All children 0-16 years of age referred with developmental delay or when developmental delay was a main feature at referral were included in the study. Details of patients were obtained from case notes. Referral information, history, examination findings, investigations and diagnoses were studied.

Results: 106 cases (64 male, 42 female, and age range 0-176 months) were identified between January 2004 and December 2006. Source of referral were General Paediatrician (55.7%), Paediatric Neurologist (34 %), General Practitioner (2.8%) and others (7.5%). 40 (37.7%) patients had a definitive metabolic diagnosis, including 8 (7.6%) that had a diagnosis at referral. A metabolic diagnosis was strongly suspected in a further 19 patients. Definitive diagnoses included: Mitochondrial Disorder (20), SCAD (1), SCHAD (1), Organic-acidopathies (3), Aminoacidopathies (4), Lysosomal Disorders (2), PDH deficiency (2), UMP deficiency (1), Menkes Disease (1), Genetic Conditions (4) and late diagnosed Galactosaemia (1). Variables associated with a higher diagnostic yield included: Microcephaly, Pigmentary Retinopathy, High Serum Lactate and Abnormal Urine Organic Acids. Findings were similar when the 19 probable cases of metabolic disorder were included.

Conclusion: Over a third of patients referred with developmental delay were found to have a metabolic diagnosis, we believe even this is an underestimation as we have not included the probable cases of metabolic disorder in our study. This significantly higher diagnostic yield than previously described might reflect the higher birth prevalence of inborn errors of metabolism in Ireland. We emphasize the importance of testing for a treatable IEM in children presenting with developmental delay.

OP52 **Metabolic/Endocrine 04**

AN INTRODUCTION TO POMPE DISEASE

Nabil Abdulrahman Yassin MD
Pediatrics Department-Assistant chairman
Head of Hematology Oncology Children's Unit, Makassed Hospital, Beirut, Lebanon.

Pompe's disease is a rare, progressive, and often fatal muscular disease. It is caused by a deficiency of the acid alpha-glucosidase (GAA) enzyme that hydrolyzes lysosomal glycogen. Pompe disease is a single disease but manifests in a variety of clinical pictures depending on the age of onset, rate of progression of the disease, and extent of organ involvement. All patients with Pompe's disease share the same general disease course, namely the steady accumulation of glycogen substrate in target tissues with skeletal, cardiac, and smooth muscle. This leads to progressive debilitation, organ failure and/or death. The fact that enzyme replacement therapy is now possible necessitates early diagnosis.

Accurate guidelines for the management of Pompe disease were developed for health care providers to facilitate the prompt diagnosis and treatment of these patients. These management guidelines address evaluation and diagnosis across multiple organ systems involved in both infantile and late-onset Pompe disease. A guideline that will facilitate the appropriate diagnosis, treatment and management of patients with Pompe's disease was developed. This aims to raise awareness of this condition in order to expedite their diagnosis so they can take advantage of the emerging therapeutics such as ERT.

OP53 **Metabolic/Endocrine 05**

PERMANENT NEONATAL DIABETES MELLITUS IN OMAN: EPIDEMIOLOGY, CLINICAL& GENETIC FINDINGS

Abdelaziz Elamin, Basker Bappal, Saleh Al Khusaiby
Dept of Child Health, Sultan Qaboos University, Oman

Background: permanent neonatal diabetes mellitus (PNDM) is a rare form of diabetes with unclear etiology and pathogenesis.

Objective: the study aimed to estimate the incidence and prevalence of PNDM, and to determine the clinical profile of this condition in the Sultanate of Oman.

Methods: The children who develop diabetes mellitus during the neonatal period and continue to be insulin-dependent after the first year of life satisfy the diagnostic criteria for permanent neonatal diabetes mellitus (PNDM). All children who were diagnosed as PNDM between June 1991 and June 2006 were included in the study. Clinical & family history was documented and physical and lab findings were noted.

Results: The mean incidence was 2.9 per 100 000 live births/year and the prevalence among children below age 5 years during 2005 was 2.7/100 000. Diarrhea, fever, lethargy, poor feeding and failure to thrive were the most common presenting symptoms. Intrauterine growth retardation was noted in all patients and diabetic ketoacidosis at presentation in 20% of them. Hyper-triglyceridaemia was constant finding. No infant had clinical or immunological evidence of congenital viral infections. None had C-peptide excretion or circulating GAD or islet cell antibodies during diagnosis or follow up. The other important features were parental consanguinity in all, more than one sibling affected in the same family and HLA-DR2, the diabetes resistance alleles, association in 80% of patients. None of the patients had exocrine pancreatic deficiency, autoimmune disease or auto-antibodies. Despite marked growth retardation at birth, there was a significant improvement of growth after initiating insulin therapy. All patients had normal developmental milestones, except one who had developmental delay following a severe and prolonged attack of hypoglycemia. Genetic studies of the affected families suggest an autosomal recessive mode of transmission.

Conclusion: the reported incidence of PNDM in Oman is the highest in the world. The very high rate of parental consanguinity, occurrence in both sexes and in two siblings in the same family, absence of islet cell antibodies and the presence of HLA-DR2 loci in 60% of patients suggest that PNIDDM is a different disease process from the standard type 1 diabetes in childhood.

OP54 **Metabolic/Endocrine 06**

RISK FACTORS AND PSYCHOLOGICAL EFFECTS OF METABOLIC SYNDROME IN ADOLESCENTS IN THE UNITED ARAB EMIRATES

Abdelazim Mohamed Mabrouk, MBBS, CMD
Paediatric Specialist, Al Ain, UAE

Introduction: Metabolic syndrome is defined as a clustering of abdominal obesity, hypertension, hypertriglyceridaemia, low high density lipoprotein, hyperglycaemia and hyperinsulinaemia. Diagnosis is made when 3 or more of these risk factors are present.

Since diet and life style factors differ from one culture to another and between different countries, it is important to study the prevalence in each community. With the advent of oil and the economic boom, UAE has seen a rapid social change accompanied by westernization of diet and life style. This rapid economic development and urbanization have been associated with obesity, inactivity, and a higher prevalence of type 2 diabetes among Arabs. The maximum impact occurred on the young generation. Therefore, it became interesting to study this population.

Aim: To ascertain the prevalence and correlates of metabolic syndrome among the adolescents seen in the obesity clinic in Al Ain.

Method: 260 students were seen in the Obesity clinic at the School Health centre, after being identified through the School Health Screening Program. Adolescent criteria which are modified from the National Cholesterol Education Program Adult Treatment Panel 111was used to define metabolic syndrome. Each subject filled a risk assessment questionnaire and Beck depression rating scale.

Results: 44% of youngsters has metabolic syndrome. The prevalence of metabolic syndrome increases with the severity of obesity. Depression was found in three quarter of those with metabolic syndrome. Our study recommended that Paediatrician and Primary care providers must be aware that, as in adults, risk factors for metabolic syndrome and type 2 diabetes may cluster in children and adolescents. Early identification of children at risk will be crucial to the prevention of chronic disease and cardiovascular complications during childhood and in later life. The best approach to decreasing the incidence of metabolic syndrome in children may be prevention. Care providers can encourage children, adolescents, and their parents to adopt lifestyle changes such as healthier diets, increased physical activity, and decreased sedentary activities.

OP55 **Metabolic/Endocrine 07**

VITAMIN D DEFICIENCY RICKETS IN YEMENI CHILDREN

Ahmed M. Al-Awdi (MSc), Salah A. Ibrahim, A/karim Y Rase
Department of Paediatrics, University of Sana'a, Sana'a, Yemen

Aim: To study the prevalence, risk factors and clinical features of rickets and to evaluate the impact of health education as a part of treatment in vitamin D deficiency rachitic children.

Method: This a prospective community-based, case-control clinical trial conducted in the surrounding districts of Sanaa, the capital of Yemen. Two hundred and fifty cases of infants aged 2-35 months were enrolled in the study, recruited by active surveillance. Fifty controls matched for age and sex were randomly selected. The trial duration was two and a half years. The cases were collected, thoroughly examined and investigated by doing serum levels of calcium, phosphate, vitamin D and alkaline phosphate. In addition, x-rays of both wrist joints were done, then re-evaluation by examination and biochemical and radiological tests was performed six months later.

Results: The prevalence of vitamin D deficiency rickets was found to be 18.7% and two thirds of cases were infants below 12 months of age. The associated risk factors included deficient exposure to sunlight ($P<0.0$), prolonged breast feeding without supplementation of solids ($P<0.05$) and poor dietary supplementations. The majority of mothers and 18% of fathers were illiterate and not only unaware of the benefits of sunlight to infants but also they had misconceptions. The predominant clinical features were rosary beads 96.8%, broadening of wrist joints 82%, chest deformity 74.4%, pot-belly abdomen, Harrison sulcus and kyphosis in less than half the cases. Estimation of serum calcium, phosphate and vitamin D were significantly low in cases compared to controls ($P<0.05$). All cases demonstrated radiological features including widening of joint spaces, broadening, cupping and fraying of epiphysis of radius and ulna, delayed bone age was observed in some cases. The intervention concentrated on intensive health education sessions in calcium supplementation and vitamin D injections. Improvement in knowledge, attitude and practice of mothers towards sunlight exposure was observed, which revealed the benefit of health education.

Conclusion: Rickets is a preventable disease, and the preventive measures are feasible and cost-effective and the health system in Yemen must realize the magnitude of the problem and implement an intensive health education program, which should aim at raising the awareness of mothers on the benefits of exposure to sunlight, better breast feeding and infant feeding practices.

OP56 **Nutrition 01**

WHY EXCLUSIVE BREAST FEEDING FOR SIX MONTHS

Abdelwahab T H Elidrissy, MBBS, FRCP, FRCPCH
Professor of Paediatrics, College of Medicine, Taiba University, Madina Munawara, KSA

The 25th international congress of pediatrics adopted the WHO UNICEF recommendation: (exclusive breast feeding for six months to be continued with supplements for tow years). By doing so it is hoped to prevent many infant mortalities. We have this slogan in The Quran for 14 centuries but we are not following it and our infant mortality is above 100 /1000 in most Arab countries. The verse no. 232 Surat Albagarah (The Cow)

(و الوالد ات يرضعن اولادهن حولين كاملين لمن اراد ان يتم الرضاعة)

From this verse Islamic scholars have extended more than 10 laws to be followed:

1. Brest feeding is a right for the baby.
2. Breast feeding is a must for the mother.
3. Father is to give full subsistence.
4. Relatives of the father to take over in his absence.
5. Mother cannot stop breast feeding on her own.
6. Stopping breast feeding should be in agreement of both parents after been discussed.
7. A wet nurse has to be hired to continue breast feeding.
8. The father is to pay the wet nurse what is agreed on.
9. The father and mother in case of divorce should give priority to welfare of the baby.
10. No hard feelings from either side.
11. In case of father of mother should not prevent reconciliation of the couple especially if there is a baby between them. Parents should observe that GOD is seeing them.

It is now after 14 centuries we are truly realizing from scientific evidence the importance of breast feeding in preventing death, disease and deviant behavior. That is why breast feeding brothership and mothership is sacred ONLY in the Islamic teachings. I urge the paediatricians in the Arab world to take this slogan religiously and maintain tha harmony maintained by the Muslims over centuries otherwise Andalusia would have been the example.

OP57 **Nutrition 02**

EXCLUSIVE BREAST FEEDING FOR SIX MONTHS COMPARED TO FOUR MONTHS: A CLINICAL TRIAL IN KHARTOUM STATE

Suad A, Zeidan A Zeidan
Dept. of Community Medicine, Faculty of Medicine, University of Khartoum, Khartoum, Sudan

Introduction: Appropriate feeding practices are of fundamental importance for the survival, growth, development, health and nutrition of infants and children everywhere. In the light of this, the optimal duration of exclusive breastfeeding is one of the crucial public health issues that the World Health Organization (WHO) keeps under continual review. There has been consensus on the need for exclusive breastfeeding; however, there has been considerable debate on its optimal duration. Appropriate feeding practices are of fundamental importance for the survival, growth, development, health and nutrition of infants and children everywhere. In the light of this, the optimal duration of exclusive breastfeeding is one of the crucial public health issues that the World Health Organization (WHO) keeps under continual review. There has been consensus on the need for exclusive breastfeeding; however, there has been considerable debate on its optimal duration.

Aim: To assess the weight, height and iron status of infants who were exclusively breast fed for six months compared to four month.

Method: The study group was selected from Omdurman Maternity Hospital and the mothers were instructed to exclusively breastfeed their infants. The follow up took place at community level, where the study groups were living and the measurement of the parameters of the study took place at the community

health centres. At the age of four months, the infants were divided into two main groups; group A, 60 infants introduced food, while the other group (group B), 60 infants, continued exclusive breastfeeding for other two months to complete the exclusively breast feeding for six months. Group B at 4 month were subdivided into two groups, thirty infants were given iron supplement (Group Bfe), while the other thirty infants were given a placebo (Group Bp). At the age of six months the infants' growth was assessed using parameters of weight and length and the Hb concentration was evaluated for the whole group.

Results: At the age of six months, weight, height, and Hb concentration of the three groups were compared; t test and 95% confidence interval were used to test the significant. The mean weight of Group A was (8.4kg, SD 7.3kg), compared to 7.3kg SD1.1), (P value =0.19). The mean height of Group A was 68cm (SD2.7) compared to 68cm (SD4), P value = 0.6). Hb concentration of Group A was 10.6 g/dl (1.6) compared to 10.4 (0.8)g/dl for Group Bfe and 10.4 (1.7) for group Bp, P- value = 0.7.

Conclusion: There was no significant difference in weight, height and haemoglobin concentrations between exclusively breast feeding for six month compared to four months or introduction of food at four month.

Recommendation: Based on these results, the study recommended to policy makers to adopt exclusively breast feeding for six months

OP58 **Nutrition 03**

PARTIALLY HYDROLYZES INFANT FORMULA: FACTS AND MYTHS

M. Miqdady, MD, FAAP
Assistant Professor of Paediatrics, Jordan university of Science & Technology, Amman, Jordan

This presentation will provide an overview of hydrolyzed infant formulas; partially vs. extensively hydrolyzed and the differences in composition, indications and their uses. The role of breast feeding in preventing atopy will be emphasized. Nutritional adequacy of hydrolyzed infant formula and their role in preventing allergy in high-risk infant will be addressed. Extensively hydrolyzed but not partially hydrolyzed formulas may be used to treat cow's milk protein allergy. Definition and prediction of high-risk infants in anticipating mothers will be presented. The fact of the matter that partially hydrolyzed formulas can be used to prevent allergy in high risk infant.

The issue of allergenicity and induction of tolerance and their paramount role in high-risk infant will be discussed. The indications of partially hydrolyzed formulas and their role of preventing allergy supported by the major double-blind controlled studies will be of discussed in details, including the GINI study and it's follow up updates. Summary of relevant studies and meta-analysis studies will be discussed in greater details.

OP59 **Nutrition 04**

THERAPUTIC FEEDING CENTRE PROGRAMME (TFC) IN PORT SUDAN

Zeinab Mohamed Gaily. MBBS, MD,
Consultant Paediatrician, Port-Sudan Hospital, Sudan

Method: This a prospective study done in Port Sudan Sep 2003-June 2007 to reflect the experience of TFC in Red Sea State.

Method: Anthropometric nutritional survey was done by Oxfam in collaboration with the S M of H and Unicef. The GAM was 12.3% in 1998 with a SAM of 2.1% with in 2006; the survey done showed a GAM of 26.8% and the SAM was 5.2%.Accordingly TFC started by ACF in 2003. Home treatment programme started in March 2004 and CCP in 2004-2005.

Results: It was found that each year; the peak of malnutrition is reflected by a seasonal fluctuation. The highest admission is during Nov2006 with 243. Then there is decrease of the admission till the lowest one in april2007, 24 admissions over the study period, the TFC results were highly improved. In 2003 the cure rate of TFC Tagdom was only 27% and 23.6% in TFC PH. In 2006 the cured rate of Tagdom increased up to 68.8% and in TFC PH up to 49.7%.The rate of defaulter decreased (53% to 31.9%) between 2003 and 2006. Also the death rate decreased (24.4% to 11.8%). About home treatment, the cured rate 94.1%, defaulter rate 5.9% and no death.

OP60 **Nutrition 05**

SERUM ALPHA AMYLASE, LIPASE AND STOOL FAT AS A MEASURE OF EXOCRINE PANCREATIC FUNCTION IN SUDANESE CHILDREN WITH PROTEIN ENERGY MALNUTRITION

Suzan I Ahmed, E M Elshibly, M.P.H (Harvard), M.D (U of K), FRCPCH
Gaafaar Ibn Oaf Specialized Children Hospital, Khartoum, Sudan

Introduction: Pancreatic exocrine dysfunction in PEM has been a frequent observation in many records. The enzyme synthesis by the pancreas is affected by the nutritional deprivation.

Aim: To determine the pancreatic exocrine function, namely serum amylase, lipase and stool fat in PEM and its types. An important aim was to correlate the defect present to some clinical and biochemical data with special emphasis on the effect of nutritional rehabilitation.

Method: The study was a prospective hospital based case and control study. Fifty children with severe PEM and fifteen healthy age and sex matched group were enrolled in the study. The cases, including 21 with marasmus, 19 with kwashiorkor (KWO) and10 with marasmic kwashiorkor (MKWO) were recruited from Dr. Gaafar Ibn Auf Specialized Children Hospital. Full history and thorough clinical examination including anthropometric measurements were performed in all cases and controls.

Results: Serum amylase, lipase and stool fat were estimated together with other biochemical investigations namely serum albumin and globulin and hemoglobin, on presentation and two weeks later. The mean age of presentation in cases was 18.88=6.6 months with slight female preponderance (52%). The bulk of cases were from Western states (58%). Illiteracy, inappropriate weaning practices and inadequate nutrition were the major risk factors. The most frequent presenting symptoms were diarrhea in 88% and vomiting in 78% with hair depigmentation (98%), sparsity (90%) and pallor (94%) as major clinical signs. All anthropometric measurements were significantly lower in cases when compared to controls. Regarding pancreatic exocrine function, serum amylase and lipase levels were low in all subtypes of malnutrition, being remarkably low in oedematous cases. The indices improved after nutritional rehabilitation. Hypoalbuminaemia, frequent diarrhoea and oedema were the major determining factors for pancreatic enzyme level. Non survivors had even more declining indices especially for serum amylase. The presence of stool fat in cases augmented pancreatic dysfunction but still could be due to other pathologies.

Conclusion: Pancreatic exocrine dysfunction in PEM may be an overlooked factor contributing to ongoing malnutrition in Sudanese children. We recommend estimation of PEF level as part of the evaluation of patients with PEM.

OP61 **Free communication 01**

MYCETOMA IN CHILDREN

A.H. Fahal, A.M. EL Hassan, ES Mahgoub,
Mycetoma Research Centre, University of Khartoum, Khartoum- Sudan

In this longitudinal prospective study, we report on 926 patients with histological and ultrasonic confirmed mycetoma. There were male (71.6%), their ages ranged between 4-18 years and most of them were students. The majority of the patients were from the Central and Western Sudan. The disease duration ranged between 6 months and 12 years. Most of the patients had eumycetoma (73%) caused by ***Madurella mycetomatius***. The clinical course of disease was typical in the majority of the patients; pain and history of local trauma was reported by 22.5% and 22.6% of them respectively. Surgical recurrence was reported in 47.2% which is high and unaccepted rate. Family history of mycetoma was reported in 13% of patients and this can be genetic or environmental. The left foot was affected most, that is followed by knee and hand. Rare sites were involved and that included the head and neck, chest wall and buttock. Most of the patients had calcaneum involvement radiologically and the cause of this is unclear. Cytological, histological and ultrasonic examinations of the lesion were the corner stones in the diagnosis of mycetoma in these patients. Combined medical treatment and surgical excision are the important treatment modalities. Actinomycetoma was more amenable to medical treatment. The morbidity in this group of patients was high, with high school dropout ( ) and a number of socio-economic impacts.

Key words: Mycetoma, Children, Sudan

OP62 **Free communication 02**

CHRONIC CONSTIPATION: UPDATE IN MANAGEMENT

Abdulwahab Telmesani, FRCPC, FAAP
Dean Faculty of Medicine and Medical Sciences, Umm Al-Qura University, KSA

Chronic constipation is defined by the North American society of pediatric gastroenterology and nutrition as; delay or difficulty in defecation present for 2 or more weeks and sufficient to cause significant distress to the patient. It is a common problem with prevalence up to 30%, and mostly of non organic etiology. This presentation will give an overview on chronic constipation in childhood addressing epidemiology, etiology, evaluation and management. The presentation will be an up to date review of the literature including the latest guidelines in the evaluation and management.

OP63 **Free communication 03**

HYDROCEPHALUS AND SPINA BIFIDA IN SUDAN

Dr. Omer Elamim, MBBS, FRCS.
Consultant Paediatric Surgeon, Rabat University Hospital, Khartoum, Sudan

The paper reviews the history of neural tube defects and hydrocephalus in Sudan since 1972. It reflects the pattern of the disease over the past 25 years and the surgical aspects of management. It also highlights the problems and limitations facing developing countries with limited resources and poor patient compliance.

OP64 **Free communication 04**

KAWASAKI DISEASE, CURRENT RECOMMEDATIONS FOR MANAGEMENT

Ali M El-Halabi ,MRCP,FRCP,FRCPCH
Consultant Pediatric Cardiologist, Amman, Jordan.

Kawasaki disease is a febrile illness of indefinite etiology until now. It is usually diagnosed by clinical criteria, which are necessary for making the diagnosis; however, not infrequently atypical (or incomplete) cases of Kawasaki disease are seen. The most serious complication of Kawasaki disease is the development of coronary aneurysms, which results in mortalities and morbidities. The whole point of treatment of Kawasaki disease is to try to prevent coronary aneurysms, and to treat the patient if he develops such aneurysms. The talk will focus on the most recent recommendations regarding the treatment and the long term follow up of patients who develop Kawasaki disease.

OP65 **Free communication 05**

SURGICAL MANAGEMENT OF BRONCHIECTASIS IN CHILDHOOD

Mohamed Elamin Ahmed MD FRCS, Mohamed Elhag H A/Elmageed MRCS
ElShaab Teaching Hospital, Ribat University Researsh Unit, Khartoum, Sudan

Background: Bronchiectasis is a permanent abnormal dilation of bronchi and bronchioles. The disease is characterized by copious amount of sputum with chronic ill health. It is still one of the major problems that cause morbidity and mortality in developing countries like Sudan. Early detection and management of these patients remain problematic.

Objectives: The aim of this study is to: Define general characteristics of the disease. Assessing the surgical option for treatment. Identify the surgical outcome – morbidity and mortality.

Method: Six patients were admitted to Al-Shaab Teaching Hospital. They were studied retrospectively from 2005 to 2007.These patients were diagnosed as having Bronchiectasis confirmed radiological by CT scan.At the clinical assessment the following information were included :-Age , Sex , Symptoms , Duration of symptoms , History of respiratory infections, Vaccination, Housing condition, Surgical treatment modality ,surgical morbidity and mortality ,clinical outcome .

Results: It is found that the mean age of children is 10.1 years. The main symptom is cough which is presented in all patients. Hemoptysis is the following symptom. The mean duration of symptoms is 3.58 years. Mean age of patients when they had their symptoms is 6.5 years. All patients had past history of repeated respiratory infections.4 patients were fully vaccinated. All patients had lower lobe bronchiectasis; 2 on the left side and 4 on the right side. All patients undergone lower lobectomy. Post- operatively: 5 patients were improved and 1 patient developed post-operative infection. Mortality rate was 0.

Discussion: The paper discusses the indications and outcome of surgical treatment.

Conclusion: Surgery is found to be a reliable treatment with acceptable mortality and morbidity in childhood. Symptoms usually begin in the first decade of life. Bronchiectasis remains a disease of concern to pediatricians particularly in developing countries some cases can be missed so drawing attention is very important.

OP66 **Free communication 06**

NONCOMPACTION OF THE VENTRICULAR MYOCARDIUM: A REVIEW OF 42 PATIENTS FROM THE MIDDLE EAST AND AFRICA

Sulafa KM Ali, FACC, FRCPCH
Department of Paediatrics, Faculty of Medicine, University of Khartoum, Khartoum, Sudan.

Background: Noncompaction of the ventricular myocardium (NCVM) is an often underdiagnosed cardiomyopathy.
Method: Patients diagnosed as NCVM by strict echocardiographic criteria at King Abdulaziz Cardiac Centre (Riyadh-KSA) from January 2000 to July 2004 and at the Sudan Heart Centre from August 2004 to July 2007 were included.
Results: Forty one patients with NCVM were identified (22 per 10 000 echocardiograms). Patients were divided into 3 groups. Group 1: included 13 patients with isolated NCVM, group 2 included 24 patients with NCVM associated with congenital heart disease (CHD) and group 3 included 5 patients with NCVM associated with mitral regurgitation (MR). Group 1 included 10 females (female to male ratio of 3:1). Four patients (28%) had positive family history with lethal outcome in 4 other females (outside the study). In all patients there was severe myocardial dysfunction which continued to be the same on follow up except for2 patients who showed clinical and echocardiographic improvement.Group 2 included CHD: ventricular septal defect, coarctation of the aorta, patient ductus arteriosus , pulmonary and tricuspid atresia and hypoplastic left heart syndrome with right ventricle NCVM. Only 6 patients (28%) had myocardial dysfunction. Seven patients had surgical repair/palliation and three developed serious post operative complications. Group 3 included 5 patients (4 females) with MR associated with deformity of anterior mitral leaflet and mal-coaptation. Myocardial function was preserved in all patients. One patient needed mitral valve replacement and 4 continued to have significant MR.
Conclusion: NCVM is not as rare as is thought. Females are more affected. Spontaneous improvement can occur. Mitral valve deformity leading to MR is a new association.

OP67 **Neonatology 01**

COST OF INTENSIVE CARE FOR PREMATURES IN JORDAN HOSPITAL: AN EXAMPLE FROM A DEVELOPING COUNTRY

Yousef K Abu-Osba
Neonatal Intensive Care Unit, Jordan Hospital, Amman, Jordan

Background: Appropriate neonatal intensive care is very costly. Unfortunately proper management for every sick newborn is not available or it is inadequate due to lack of facilities, nursing staffing, trained physicians, and inadequate funding. Several studies from the developed countries showed the details of the expensive cost for such services. Unfortunately, neither the government hospitals, nor the university centers had provided this very much needed information in the Arab countries.
Setting: Jordan Hospital is a private hospital with a modern referral Neonatal Intensive Care Unit (NICU) with a capacity of 25 intensive care beds, well equipped, well staffed with trained experienced nurses and pediatric residents supervised by consultant neonatologists.
Methods: Due to lack of NICU cost studies from the Arab countries, we conducted a preliminary cost study in Jordan Hospital starting January 1, 2002 for the first 200 patients admitted to NICU. Hospital charges, medications, and supplies and physicians fees follow the guidelines of the Ministry of Health and Jordan Medical Society. Total daily cost and the details of the charges were collected for every patient from the accounting office and entered into a computer program for analysis. Clinical information was extracted from the patients records.
Results: The average daily hospital charges for all patients admitted to NICU was US $ 200, and average total charges (TC) was $ 1500. Average hospital stay (HS) for all patients was 5.7 days. HS mean and TC for very premature infants with birth weight (BW) 500-1000 gm who survived was 36 days and $ 10,564 respectively, and for non survived HS mean was 21 days and TC mean $ 9,588, and for neglected infants (patients the

OP69 **Neonatology 03**

NECROTIZING ENTEROCOLITIS: NEW BASICS?

Mohamed Bayari, MD
Casablanca, Morocco

The improvement of survival of more and more premature, more and more small babies is not only the result of a better understanding and managing of the respiratory disease but rather of a coherent and global management. Howe ver, such a "succèss" is paralleled with an increasing morbidity (neurosensorial deficiencies, gastro-intestinal complications...).
The ideal nutritional approach, while waiting for digestive maturation, remains to be defined and the clinician is all days, facing a dilemma: to ensure a postnatal growth similar to in utero one without exposing the newborn baby to the risk of a Necrotizing Enterocolitis (NEC), often striking down. Neurodevelopmental outcome is of crucial interest, also. Its incidence is estimated at 0,23/ 1000 live births according to the Royal College of Pediatrics Health with mortality inversely proportional to gestational age and birthweight.
To date, it did not deliver yet all its mysteries and several factors are advanced to explain the mechanisms of them. Prematurity seems to be the corner stone around which will be grafted intestinal immaturity, bacterial colonization, enteral feeding... the current data of the literature, mainly observational studies, do not make it possible to slice clearly. Things are far from being clear and simple.
The role of the epithelial cell as well as growth factors has been brought as a central actor for a few years and is still explored for a better understanding. Patole et al., in a recent publication, support the benefit of a standardization of nutritional protocols for the very low birthweight ones; a metaanalysis of the six observational studies showed a reduction of 87% of the incidence of the NEC using such protocols. The heterogeneity of the studied populations as well as the variability of the protocols in question lets still plane some doubts and calls for controlled randomized trials.
While waiting, what's about our current practices? What is the long term prognosis of NEC? What can one await from fundamental and translational research in progress?

OP70 **Neonatology 04**

THE IMPACT OF PRENATAL MANAGEMENT DECISIONS: CAN WE PRACTICE FOETAL PALLIATIVE THERAPY?

Omer Bashir Abdelbasit. FRCP, FRCPCH
Consultant Neonatologist, Armed Forces Hospital, Riyadh, KSA.

Background: In today's world the practice of Medicine has moved towards an integrated management approach and this is particularly true for obstetric and neonatal services. The advances in foetal medicine and the use of technology in delineating foetal abnormalities and disorders early in pregnancy has put a great burden in care providers as to what would the best way of managing these cases. This is especially true for those practicing in the Moslem World where the Islamic code of ethics towards the well being of the mother and her baby are to be observed.
Method: In the year 2000 we started a joint weekly meeting between the obstetric, neonatal and imaging departments where all high risk cases with abnormal antenatal ultrasound findings or previous family history of medical disorders in the babies are discussed to help plan the appropriate management decisions for the current pregnancy under discussion. This turned to be a challenge taking into consideration the views of the Moslem Scholars about the sacredness of life in Islam and the issues of termination of pregnancy for the malformed foetus. We are trying to look at the best ways of managing a severely malformed baby since this constitutes a burden to the treating physician, family and involve a huge cost on the NICU and the concerned hospital with ultimate depletion of the resources but without ignoring our Islamic values.

Results: Over the last seven years we have gained great experience in making management decision applicable to the Islamic and local cultural backgrounds and we think that these results could be shared with our care providing colleagues. After identifying all abnormal cases we will present the results and outcome of the management decisions and how these affected the mode of delivery and the care provided for the malformed babies. The impact of these decisions on obstetric practice and NICU care are also reflected.

OP71 **Neonatology 05**

TRIPLE DYE PLUS RUBBING ALKOHOLVERSUS TRIPLE DYE ALONE IN UMBILICAL CORD CARE

Alawia K. Suliman, MD, Heidi Watts, RN, Jessica Beiler, MPH, Tonya S. King, PhD, Sana Khan, Mary Beth Carnuccio, MSN, RN, and Ian M. Paul, MD, MSc
Penn State Children's Hospital, Hershey, Pennsylvania, USA.

Introduction: Current practices for umbilical cord care vary across centres, but the evidence regarding these practices and their impact on cord separation, complications and health care utilization are limited.
Aim: To compare **triple dye alone** (brilliant green, crystal violet, and proflavine hemisulfate) versus **triple dye plus twice daily rubbing alcohol** (isopropyl alcohol) on time to umbilical cord separation, complications, and healthcare utilization.
Method: 102 newborns were randomized to receive either triple dye in the first few hours of life plus twice daily application of rubbing alcohol until cord separation, or triple dye alone. Parents were given calendars to mark the dates of cord-related healthcare utilization, worrisome umbilical appearance, and cord separation. The primary outcome was time to cord separation between the two treatment groups. Fishers exact and two sided T-tests were used to analyze the data, due to the absence of censored observations.
Results: 90/102 newborns completed the study. There were no significant differences at baseline between treatment groups with regards to gender, race/ethnicity, maternal age, maternal parenting experience, and type of infant feeding (breastfeeding vs. bottle feeding).The mean time to cord separation in the combined treatment group (n=46) was 16.6 ± 5.8 days vs. 15.6 ± 4.1 days for the triple dye alone group (n=44) (p=0.36). Office visits, phone calls to nurse triage, cord related complications, and silver nitrate applications did not significantly differ between groups.
Conclusion: There is no significant benefit to the addition of twice daily applications of rubbing alcohol to neonatal umbilical cords following triple dye treatment after birth. The practice of applying rubbing alcohol to umbilical cords appears to provide no therapeutic benefit and also adds time and expense to umbilical cord care.

OP72 **Neonatology 06**

PREMEDICATION FOR INTUBATION IN IRISH NEONATAL UNITS

S. Elkashif, R.M.Pinnamaneni
Dept. of Paediatrics, Letterkenny General Hospital, Ireland

Aim: To establish the extent and type of premedication used to facilitate intubation in neonatal units in Ireland.
Method: A quantitative research design was employed. A structured telephone survey of 22 neonatal units was conducted and the data was interpreted using inferential statistics.
Results: All of the units contacted participated. Eleven units (50%) used premedication to facilitate intubation but only 2 (9%) had a written policy. Morphine was most commonly used 10(45.4%). Five of the six units that used muscle relaxants co-administered sedative drugs. Suxamethonium was used by 3 (13%) units but only 1 of these combined it with atropine. Drug doses varied between units for all medications.

Conclusion: The physiological benefits and effectiveness of premedication for endotracheal intubation in neonates has been demonstrated.[1] The results of our survey were similar to previous studies conducted elsewhere.[2, 3] Practice guidelines and training on premedication for intubation in neonates should be developed and implemented.

PVII **Plenary 07**

CHALLENGES AND OPPORTUNITIES IN INTRODUCING NEW VACCINES IN THE ARAB COUNTRIES

Najwa Khuri-Bulos
Professor of Paediatric infectious diseases, Chairman Department of Paediatrics, Jordan University Hospital, Amman, Jordan.

PVIII **Plenary 08**

THE DILEMMA OF BREAST FEEDING AND HIV-1 INFECTION IN SUBSAHARAN AFRICA

Taha Al Tahir Taha MBBS, PhD
Professor and Co-Director, Infectious Diseases Program, Department of Epidemiology, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, USA

In sub-Saharan Africa, women breastfeed their babies from birth to about 24 months because breastfeeding satisfies the nutritional needs of the infant and is frequently encouraged by other family members as a cultural norm. Not to initiate and maintain breastfeeding raises suspicion in the community about the HIV status of the woman and may lead to discrimination. Furthermore, substitutes of breast milk are either not affordable or can easily be contaminated. Breastfeeding protects against diarrheal and upper respiratory diseases of the infant and has many other well documented biological benefits. Breastfeeding, however, is the most important route of postnatal mother-to-child transmission (MTCT) of HIV. Approximately, 44% of HIV-1 transmission can be attributed to breastfeeding. Studies in Africa have shown that at age 24 months the cumulative risk of HIV transmission among infants not infected at age 1.5 months is ~10%.

To counter-balance the benefits and risks of breastfeeding when the mother is HIV infected, it is recommended that women should continue to exclusively breastfeed their infants up to age 6 months and then to abruptly wean. Some studies estimate that 85% of breastfeeding-associated HIV transmission could be prevented if HIV-infected women stop breastfeeding by 6 months. However, post-weaning, the infant can acquire serious gastroenteritis and/or malnutrition and both conditions could lead to death of the child. Studies to reduce MTCT of HIV in Malawi, Uganda and Kenya have raised concerns that early breastfeeding cessation in settings with unsafe water/poor hygiene is associated among HIV-uninfected infants with high rates of gastroenteritis-related hospitalization and increased infant death. A recent trial from Zambia also showed no effect of early breastfeeding cessation on HIV-free survival – there were no differences in survival at 24 months among infants who stopped breastfeeding at 4-6 months compared to those who continued breastfeeding. In Botswana there was no difference in HIV-free survival at 18 months between formula-fed and breastfed (+AZT) infants.

To avoid these problems, counseling to assist mothers in safe preparation of nutritional weaning foods is frequently discussed in educational sessions, including simple tools to purify and boil water. These programs should promote breastfeeding among HIV-uninfected women and introduction of safe complementary foods as appropriate. HIV-infected infants should continue to be breastfeed. The WHO revised its guidelines in October 2006 and emphasized the most appropriate infant feeding option for an HIV-infected mother should

depend on her individual circumstances, including her health status and the local situation, but should take greater consideration of the health services available and the counseling and support she is likely to receive. These guidelines also recommended exclusive breastfeeding for HIV-infected women for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS). At six months, if replacement feeding is still not AFASS, continuation of breastfeeding with additional complementary foods is recommended, while the mother and baby continue to be regularly assessed. All breastfeeding should stop once a nutritionally adequate safe diet without breast milk can be provided. Given the consequences of early breastfeeding cessation, results from maternal and infant extended ARV prophylaxis and vaccine trials are crucial to determine which strategies will make breastfeeding safer for HIV exposed infants in resource limited settings.

PIX **Plenary 09**

PAEDIATRICS AND CHILD HEALTH: THE CHALLENGES OF THE 21ST CENTURY

Ahmed Ibrahim Mukhtar
President of British Sudanese Association of Paediatricians (BSAP), U. K

Events in the 21st century will present challenges and opportunities to the children, their parents and families and to the professionals in the fields of Paediatrics and Child health.
Advances in science will contribute to the diagnosis and treatment of many hereditary and congenital diseases.
Pharmacological advances will lead to the development of new treatments for many chronic and infectious diseases.
Climate changes, mass migration, wars and 'new' infections will all produce their challenges and will require clinicians to work with families, governments and other agencies to achieve satisfactory solutions and outcomes.

OP73 **Neonatology 07**

NEONATAL OUTCOME OF 270 IVF PREGNANCIES AT KHARTOUM FERTILITY CENTRE

Fawzi A.R Mahgoub, Elsir Abu Elhassan, Yagoub Mohamed Abdelmagid
Consultant Paediatrician, Khartoum Fertility Centre, Khartoum, Sudan

Method: Retrospective analysis of 270 pregnancies conceived and delivered following Intr-cytoplasmic Sperm Injection (ICSI) at Khartoum fertility Centre from August 2000-April 2004.
Results: Of the 270 pregnancies; 38(14.1%) were miscarriages, 11(4.1%) ectopic pregnancies. The remaining 221 pregnancies resulted in a total of 311 babies. There were 146(54%) Singleton, 61(22.6%) sets of twins, 13(4.8%) sets of triplets and 1(0.4%) set of quadriplets. A total of 28(12.7%) women were delivered prematurely. The respective preterm delivery rate for Singleton, Twins and triplets were: 3.4%, 26.2% and 53.8%.
Altogether there were 7 neonatal deaths, one baby died due to major congenital anomalies and all the remaining six babies died as a result of prematurity. There were no still births. The overall neonatal mortality rates for Singletons, Twins and Triplets were: 3.2/1000, 12.8/1000 and 6.4/1000 respectively.
Discussion: Our results are inkeeping with others confirm that prematurity remains the main and most important cause of neonatal mortality. Clearly there is an urgent need for introducing important cause of neonatal mortality. Clearly there is an urgent need for introducing important positive changes to hopefully improve both obstetric and neonatal care.

OP74 **Neonatology 08**

NEONATAL PRESENTATION OF *PHOX2B* POSITIVE TWIN WITH CCHS

Miqdad H. Mukahhal, Yousef K. Abu-Osba
Amman, Jordan

Background: Congenital Central Hypoventilation Syndrome (CCHS) is a well known disease with variable presentation ranging from hypoventilation during sleep to complete dependence on mechanical ventilation when both awake and asleep. It might be also associated with other clinical presentations like Hirchsprung disease and other manifestations of autonomic nervous system dysregulation(ANSD).

As reported in literature, it has been recognized that some individuals with nocturnal alveolar hypoventilation, features of ANSD, and a polyalanine expansion mutation in *PHOX2B* characteristic of CCHS **DO NOT** present until childhood or adulthood.
We report twin cases (brother and sister) who were admitted to our NICU soon after birth with hypopnea, hypercarbia and respiratory acidosis and required mechanical ventilation. They were proved to be CCHS patients.

Case Report: Rania and Abdallah were born by C/S after 36 weeks of pregnancy (IVF-due to paternal history of immotile cilia syndrome). Their birth weight was 2.44 kg and 2.41 kg , Apgar score was 5/6/7 at 1/5/10 minutes respectively. Naloxone was given during resuscitation. They were sent to regular nursery and started on O2 by head box due to poor respiratory effort. Rest of their physical examination was normal. Their ABG results showed severe respiratory acidosis (pH 7.04, 7.00- PCO2 70,75) ; so they were transferred to NICU and started on mechanical ventilation. Their initial chest X-ray on admission was normal without signs of RDS. The twin continued to require 24 hr assistance in ventilation with failure of multiple trials of weaning from ventilation and extubation. The babies were diagnosed clinically to be CCHS. Our diagnosis was confirmed genetically by a muscle biopsy that proved the babies were *PHOX2B* positive. The whole course of their hospital stay will be discussed with comparison with other similar cases.

Conclusion: ***PHOX2B*** positive CCHS patients can present in neonatal period and require long term multidisciplinary team management.

OP75 **Neonatotology 09**

CLINICA APPROACH AND MANAGEMENT OF A SICK NEONATE WITH ACUTE METABOLLIC EMERGENCY

Sarar Mohamed FRCPCH, MD
Dublin, Ireland

Inborn errors of metabolism are group of disorders caused by defects in the metabolism of amino acids, carbohydrates and fat. Collectively they account for a significant proportion of sick neonates and children. The incidence of these disorders is high in consanguineous communities like Sudan. If untreated most of these disorders lead to learning difficulty and death. Early detection prevents metabolic crisis, mental retardation and death. High index of suspicion together with a sound clinical approach and a proper management of acute metabolic emergencies would make a great impact on the mortality and morbidity of sick kids with inherited metabolic disorders

OP76 **Neonatology 10**

PATTERN OF NEONATAL ADMISSION AT PORT-SUDAN PAEDIATRIC HOSPITAL NURSERY IN PERIOD OF 2005 – 2007

Khalid EL Khier, MD
Paediatrician, MPCH, Port-Sudan Paediatric Hospital, Sudan

Data collected from nursery admission sheets. The annual delivery in Port Sudan Maternal Hospital was 2,400; the percentage of caesarean section was 20% from total deliveries. Forceps and ventose deliveries represented 25% including complicated deliveries. About 10% of neonatal delivered urgently admitted in Nursery Unit for urgent medical help.

Annual number of neonatal admission around 275 newborns. Common causes of nursery admission were prematurity represent around 59% from total admission, second identifiable cause was neonatal seizures including birth asphyxia and neonatal hypoglycemia and hypocalcaemia represent around 35%, congenital malformations were considered in this study, admitted neonates with this abnormality were around 3.2%. 23.7% of outcome of caesarean section and assisted deliveries were admitted in the Nursery Unit; 60% of them admitted due to neonatal seizures. Mortality among this group of neonates was 325% which indicated high mortality rates compared with other Khartoum nursery units.

OP77 **Neonatology 11**

القابلة القروية أحدى دعامات الوصول للهدف الرابع للألفية بالسودان: دراسة نوعية الرعاية المقدمة بالقابلات القرويات للأطفال حديثي الولادة -٢٠٠٦

د. إقبال أحمد بشير أبوكريق
أخصائية طب مجتمع/دبلوم في الصحة الإنجابية
وزارة الصحة الاتحادية الخرطوم السودان

المقدمة

يموت ٤ مليون طفل فى الاربعة اسابيع الاولى من العمر (فترة حديثى الولادة) كل عام, اى ا
أكثر من ١٠٠٠٠ حالة وفاة في اليوم، ٩٩% من هذه الوفيات في الدول محدودة الدخل أو النامية. التحليلات الحديثة أثبتت أن ٧٥% من هذه الوفيات يمكن حمايتها سنويا يتحسين كل عام يموت ٤ مليون طفل في الأربعة أسابيع الأولى من العمر (فترة حديثي الولادة) أي الوصول للخدمات للذين لا تتوفر لديهم حاليا وبتدخلات بسيطة وبأسعار مقدور عليها. الهدف الرابع للألفية ينادي بتخفيض وفيات الأطفال أقل من ٥ سنوات بحلول ٢٠١٥.، ٤٠% تقريبا من هذه الوفيات تحدث في فترة حديثي الولادة وبالتالي لتحقيق الهدف الرابع للألفية لا بد من العمل على تخفيض وفيات الأطفال حديثي الولادة

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الأسباب الثلاثة الرئيسة لوفيات الأطفال حديثي الولادة هي الالتهابات (٣٦%)، حالات الاختناق أو الحالات التي تنتج من مضاعفات الولادة (٢٣%) وولادة الخدج (٢٨%). معظم هذه الوفيات يمكن منعها بوصول جميع الأمهات والأطفال حديثي الولادة لخدمات وقائية وعلاجية بسيطة كالمضادات الحيوية لحديثي الولادة في الوقت المناسب وعند الحاجة إليها، التدفئة للوليد، الرضاعة الطبيعية والعلاج المبكر للإلتهابات كذلك تحسين العناية أثناء الولادة بالاضافة لتوفير أطر مؤهلة لإنعاش الوليد.

السودان قطر مترامي الأطراف يقع في المجموعة ذات الإختطار العالي للصحة الإنجابية (تقرير معدل الاختطار السكاني ٢٠٠١) والتي يعتبر معدل التعليم خاصة بالنسبة للمرأة من أهم معاييرها (يقدر بنحو ٤٩%). هذا الوضع جعل السودان لا يختلف كثيرا عن الدول النامية حيث تبلغ وفيات الأطفال حديثي الولادة ١٠٠٠/٣١ولادة حية وتعادل قرابة ٥٠% من وفيات الرضع والتي تبلغ ١٠٠٠/٦٨ القابلة القروية إحدى الأطر الصحية التي تعنى بصحة الأمهات والأطفال حديثي الولادة في مستوي المجتمع، من مهامها رعاية الأمهات أثناء الحمل والولادة، الأمهات والأطفال حديثي الولادة في فترة النفاس، توعية الأسر والمجتمعات والمشاركة في كل الأنشطة الصحية الخاصة بترقية صحة الأمهات والأطفال. يتم تدريب القابلات في السودان على منهج موحد بواسطة الزائرة الصحية والتي يتم تدريبها أيضا بواسطة زائرات صحيات. تعتبر القابلة خط الإلتقاء الأول للخدمات التي تقدم لحديثي الولادة بل تمثل القابلة العامل الصحي الأوحد في الكثير من المناطق النائية في القطر

هدفت الدراسة إلى تقييم نوعية الخدمة المقدمة بواسطة القابلة القروية للأطفال حديثي الولادة وتحديد الفجوات فيها ومن ثم وضع مقترحات لتحسينها.

الطريقة: تمت هذه الدراسة الوصفية المقطعية في ثلاثة مراحل:
المرحلة الأولى: مراجعة مكتبية للمنهج الذي يدرس للقابلات في ما يخص الوحدات التي تغطي العناية بالوليد من حيث المكونات والساعات المتاحة لذلك والمنهجية التي يتم بها التدريس والتقييم
المرحلة الثانية: تقييم عدد ٣٨ مدرسة (العدد الكلي لمدارس القابلات بالسودان) من حيث الجاهزية لتدريس العناية بحديث الولادة.وتقييم ٧٠.٦% من المعلمات من ٢٣ مدرسة (٦٠.٥% من مجموع المدارس) للمعرفة والمهارات التي تخص تدريس العناية بحديث الولادة وذلك بإستخدام ٥ استبيانات غطت المعلومات عن المدارس، المعلومات الشخصية عن المعلمة، استبيان تحريري عن معرفة المعلمة، استبيان يرصد مقدرة المعلمة علي تحضير وعرض وتقديم المواضيع المختلفة (أي القدرة على توصيل المعلومة)، استبيان لتحديد المهارات لكل معلمة على حدة (عملي)
المرحلة الثالثة: تقييم معرفة ومهارات وإمكانات القابلات العاملات في ٥ محليات في ثلث الولايات الشمالية بالسودان (٨١٢ قابلة) في ما يخص العناية بحديث الولادة. تم إستخدام استبيان لتحديد المعرفة والمهارات لكل معلمة على حدة بالاضافة لقائمة ضبط لمكونات شنطة القابلة وتحديد النقص فيها في ما يخص العناية بالوليد
النتائج: بمراجعة منهج التدريب الأساسي للقابلات إتضح أن هنالك قصورا واضحا في المكونات التي يجب أن تغطي المقدرات والمهارات التي تتطلبها المهنة لتصبح القابلة ماهرة لتقديم خدمة تمكن من إنقاذ حياة الأطفال حديثي الولادة الذين يتعرضون لمضاعفات. كذلك أوضح تقييم المدارس أن وسائل التعليم والتعلم الحديثة غير متوفرة بجميع المدارس كما أن أدوات التعليم التي تخص تدريس المهارات الخاصة بالعناية بحديث الولادة أيضا غير متوفرة. كذلك جميع المدارس لا يوجد بها منهج مكتمل. تقييم المعلمات أوضح أن ٥٨% فقط من مجموع المعلمات اللاتي تم تقييمهن لديه المعرفة بأساسيات العناية بحديث الولادة وأن نسبة ضعيفة منهن أستطعن تأدية المهارات اللازمة لإنعاش الوليد. كذلك الحال بالنسبة للقابلات حيث بلغت نسبة اللاتي يعرفن أساسيات العناية بحديث الولادة ٣٦ % واللاتي يعرفن خمسة من العلامات التي تستدعي التحويل العاجل ٢٩% فقط
جميع شنط القابلات التي تم فحصها (٨١٢) تعاني من النقص في المكونات اللازمة للعناية بالوليد
المناقشة والاستنتاجات: مما سبق يتضح أن هنالك قصورا شاملا في معرفة ومهارات القابلات والذي يرجع أساسا إلى عدم تأهيل المعلمات القائمات على أمر التدريب في المدارس. أيضا أوضحت الدراسة أن عدم تأهيل المعلمات نتج من الفجوة الواضحة في مكونات المنهج الذي يغطي العناية بحديث الولادة وكذلك منهجية ومعينات التدريس بالمدارس. القصور في معينات العمل يشكل إضافة لحجم المشكلة إذ أنه يعوق ممارسة المهارات التي تمتلكها القابلة حاليا. تحديث المنهج للتدريب الأساسي بالاضافة لإعادة تأهيل المدارس وتيسير المعلومات للمعلمات والقابلات الحاليات بالخدمة لتقديم خدمة ذات جودة للأطفال حديثي الولادة على مستوى المجتمع يعتبر من أهم التداخلات للوصول للهدف الرابع للألفية بالسودان

OP78 **Neonatology 12**

CLINICAL PTTERN, AETIOLOGY AND SHORT TERM OUTCOME OF NEONATAL SEIZURES IN KHARTOUM STATE

*Ishag Eisa Abdelmahmoud (MD), **Yahia S Abdelgadir MPCH
Khartoum Teaching Hospital, Khartoum, Sudan
**Dept. of Paediatrics, Faculty of Medicine, University of Khartoum, Khartoum, Sudan

Aim: to study the clinical Pattern of neonatal seizure, possible underlying causes and to determine short term outcome in the acute illness and neonatal period.
Methods: This is a descriptive, cross sectional, hospital based study conducted between August 2004 - February 2005.Five hospitals representing Khartoum State were selected, including Omdurman Maternity Hospital (OMH), Soba University Hospital (SUH), Khartoum Children Emergency Hospital (KCEH), Omdurman Children Emergency Hospital (OCEH) and Ahmed Gasim Hospital.
Results: Seventy five newborns with neonatal seizures from the first attack and throughout the neonatal period were studied. The admissions represented 2.3%, 1.5% of INCUs admissions in OMH and SUH respectively and 0.21%, 0.23% and 0.07% of general paediatric case admissions in KCEH, AGH and OCEH respectively. Of the seventy five newborns, 61.33% developed seizures within the first 48 hours of age.
The study found that the neonatal sepsis and with asphyxia were the principal etiological factors in 53%, 25% of cases respectively. The findings of the clinical pattern of the seizures were 55 (73.33%) multifocal,

10 (13.33%) focal, seven (9.33%) tonic, two (2.7%) subtle and one (1.3%) myoclonic seizures. Poor prognosis was associated with neonatal sepsis, birth asphyxia, multifocal, focal seizures and development of seizure in the first 48 hours of age. The mortality was 18 (24%) cases mainly during the acute illness and only one during the neonatal period.

Conclusion: Detectable causes of neonatal seizures in our environment appear to be potentially preventable by improved obstetric and neonatal care. There is bad need also to provide modern facilities for investigating newborn seizures in order to improve upon diagnostic yield and better management.

OP79 **Infections 01**

BACTEREMIA IN FEBRILE CHILDREN UNDER 3 YEARS OF AGE IN EMERGENCY DEPARTMENT OF A UNIVERSITY HOSPITAL

Abdulaziz M. Al Rashed, M.D.
Department of Pediatrics, College of Medicine, King Saud University. Riyadh, K.S.A

Background: The optimal diagnostic approach to the management of highly febrile young children has been a matter of debate.1-3 Blood cultures are often obtained as part of their evaluation.4,5

Aim: To review the results of blood culture in febrile children seen in paediatric emergency department in a 3 years period.

Method: A retrospective cohort study was conducted on 2929 highly febrile children (temperature 39.5 ± 0.5ºC) aged 2 to 36 months whose blood culture results were evaluated in paediatric emergency department of a university hospital between January 2001 and December 2003. Prevalence of bacteraemia, positive blood culture and distribution of pathogenic organisms were determined. All patients growing known pathogenic bacteria were re-evaluated and serious outcome was assessed.

Results: The mean age of patients was 10.75 months, 52% of them were boys, 48% were girls. The prevalence of bacteraemia was 1.57%. Streptococcus pneumoniae was the causative agent in 36.9% of patients. The contamination rate was 2.2%. The mean time to positive culture was significantly shorter for pathogenic organisms (18 hours ± 1.5 hours) than the non-pathogenic organism, which was 24 hours ± 4 hours.

Conclusion: The risk factors in highly febrile children included younger age group below 24 months of age and increase in WBC of more than 15,000 cell/mm3. The study also indicates that there is an increase in prevalence of Streptococcus pneumoniae resistance to ampicillin and penicillin, which necessitates the need for a polyvalent pneumococcal conjugate vaccine to be added to the routine immunization program in the Kingdom.

OP80 **Infections 02**

A CD36 MUTATION IS ASSOCIATED WITH INCREASED SUSCEPTIBILITY TO CEREBRAL MALAEIA IN SUDANESE CHILDREN

Adil Mergani[1], Mohd Yousif[1], Ammar H. Khamis[2], Nasr-Eldin M. A. Elwali[1], Elfatih Hashim[4], Mohammed Gumma[5], Bella Awadelseed[4], Magzoub, M. M[1], Ali Babikir Haboor[3]. university of Gazeira, Medani, Sudan

Introduction: Cerebral malaria (CM) is a major life-threatening complication of P. falciparum infection. Erythrocytes infected with falciparum malaria adhere to a variety of host receptors, including CD36. CD36 located on chromosome 7 at position q11.2 and encoded by 15 exons.The role of CD36 in sickle cell and CM is debatable.

Aims: To evaluate the role of CD36 in susceptibility to cerebral malaria and to determine the role of the CD36 polymorphism -188 T>G in CM

Methods: Seventy cases were confirmed as having CM by a Pediatrician, according to WHO criteria of CM. A matched control was selected. Samples were collected from both cases and their controls and DNA was extracted using salting out method and was purified by phenol-chloroform method. Screening for cd36 -188 T>G polymorphism in both cases and their controls was done using PCR-RFLP method for genotyping.
Results: The mean age of the study subjects was (6.8 ± 3.2) years. 39 (55.7 %) were males and 31 (44.3 %) were females. The highest incidence of the disease was among the age group 4 < 6 years. The genotype frequency for the polymorphism in CM cases was 84.3 % were homozygous wild type (TT), 7.1 % homozygous mutant type (GG) and 8.6 % heterozygous mutant type (TG) while among control group was 97.6 % homozygous wild type (TT), 2.4 % were heterozygote although no homozygous mutant type (GG) was observed among control group. The genotype frequency was differs significantly between CM patients and controls (odds ratio = 7.636; 95% CI = 1.048 – 13.630; P-value = 0.003).
Conclusion: From this study we conclude that children who are carrying the mutant allele, either heterozygote (TG) or homozygous mutant type (GG), are at eight time higher relative risk for developing CM than those who are homozygous wild type (TT).

OP81 **Infections 06**

EFFICACY AND SAFETY OF ARTEMISININ+ NAPHTHOQUINE(ARCO) AND ARTEMETHER + SULPHADOXINE-PYRIMETHAMINE COMBINATIONS(ART/SP) VERSUS ARTEMETHER ALONE IN THE TREATMENT OF UNCOMPLICATED PLASMODIUM FALCIPARUM IN SUDAN

Bakri Y.M. Nour1, Osman K Saeed1, Yousif Dafa Alla1, Ali Babekir Habour1, Abd Alla Abd Elkariem1, , El Fatih M. Malik2, Ahmed A. Mohamadani1
1- Blue Nile Research and Training Institute - Faculty of Medicine - University of GezirA - Wad Medani – Sudan
2- Federal Ministry of Health – National Malaria Control Program (NMCP) - Khartoum- Sudan

Method: The efficacy and safety of ARCO, ART/SP and ART alone in the treatment of uncomplicated Plasmodium falciparum were investigated in Eastern and Central in Sudan. 265 patients were enrolled in this study , 129 ,71 and 65 patients were treated with ARCO, ART/SP ART alone respectively. All patients were followed up for 28 days according to the WHO-in vivo protocol-2002.
Results: The results obtained by ARCO, ART/SP & ART, revealed that the fever clearance time (FCT) was (12.0 +/- 4.8 hrs) (10.8 +/- 9.6 hrs) & (14.4 +/- 10.6 hrs), and the clinical and parasitological cure rate was 98.4% 97.1%, 95.2% for respectively.
Conclusion: ARCO proved to be effective ACT, was very well tolerated, only7 patients had mild nausea, renal and liver functions were not adversely affected. There were also no adverse effects on bone marrow and actually Hb% improved. More than 95% of the patients said that the number of the tablets (8) were too big. So, we recommended compressing the tablets into 4.

OP82 **Infections 04**

OVERVEIW ON CHILDHOOD POST KALA-AZAR DERMAL LEISHMANIASIS (PKDL) AND IT'S MANAGEMENT USING IMMUNO-CHEMOTHERAPY IN SUDAN

F A Mahgoub[1]; A M Musa[2]; E A G Khalil[2]; A M EL-Hassan[2], Leishmaniasis Research Group
1. Department of Paediatrics, Faculty of Medicine, Elribat Elwatani University, Khartoum, Sudan
2. Department of Clinical Pathology & Immunology, Institute of Endemic diseases, University of Khartoum, Sudan.

Introduction: Post-kala-azar dermal leishmaniasis (PKDL) is a common dermatosis of multifactorial aetiology that occurs in more than half of successfully treated Sudanese visceral leishmaniasis (VL). The mean ± (S.D.) age of the children with PKDL was 6.4 ± 3.0 years. It was most severe in children aged ≤ 3 years. Males and females were equally affected. The rash was most frequent on skin that was regularly exposed to the sun. Spontaneous healing is the rule (84.8%). However, the rash may persist for years in 15.2 %. Diagnosis is mainly clinically confirmed by other test. Drug treatment for persist cases is protracted, toxic and costly.

Methods: Based on the fact that cure is strongly correlated with conversion in the leishmanin skin test (LST), dose-escalation study (n=20) followed by and randomized controlled clinical trial (n=30) were conducted to assess safety, immunogenicity and possible efficacy of multiple doses of alum-precipitated Autoclaved *L. major* (ALM) + BCG vaccine mixture in combination with Sodium stibogluconate (SSG) in Sudanese children with persistent PKDL.

Results: The Alum/ALM+BCG plus SSG proved safe with minimal local adverse events. Eighty-seven per cent of the patients in the vaccine + SSG group were cured by day 60 compared to 53% in the SSG group (vaccine +SSG efficacy= 71%, 95% CI: for RR: 0.7-1.16).

Conclusion: Alum/ALM/BCG vaccine+SSG is safe and immunogenic with significant healing potentials in persistent PKDL lesions.

OP83 **Infections 05**

RSV Infection in Children

Abdel Rahman Awad El Karim, CABP, MRCP, MRCPCH (UK)
Consultant Pediatrician / Neonatologist, Al Mana General Hospital; Khobar; KSA

Respiratory syncytial virus (RSV) is a major cause of disease in children. The diseases caused by RSV are readily transmitted and they spread rapidly each year during the RSV season, which occurs usually between November and March. However, the duration of the season varies considerably between countries and in the same country it varies from one region to the other. When infants are infected they have a higher risk of severe lower respiratory tract disease due to their smaller airways, greater peripheral airway resistance and lack of collateral ventilation.

RSV is a leading cause of admission of infants to hospitals and also it leads other viruses as a cause of deaths in infants. Prematurely born infants and those infants with conditions like chronic lung disease and congenital heart diseases are particularly prone to develop severe disease if infected with RSV. RSV infection is a serious problem in premature infants and specially those with high risk conditions due to its association with recurrent hospitalization, death and the possible link between RSV bronhiolitis in infancy and the development of recurrent wheezing.

In this presentation RSV- associated diseases – mainly lower respiratory tract infection – their pathophysiology, epidemiology and the therapeutic options for treatment and prevention in high risk infants are discussed.

OP84 **Infections 06**

CONTROL OF AQUIRED INFECTION IN HOSPITAL AND THE ROLE OF THE NURSE IN PREVENTIVE MEASURES

Batoul Ahmed Mahmoud
Sister in Gaffer Ibn Oauuf Children Hosoital, Khartoum, Sudan

Hospital acquired infection (Nosocomial infection) is one of the most common problems in hospitals; it leads to high mortality and morbidity in infancy as well as in childhood, especially in those staying for long periods in hospital; being subjected and exposed to infection. Its consequences leading to life-threatening conditions. The lack of universal precautions and adoption of hospital polices and strategies of infectious control committee. It's important to use measures that should be adopted by all hospital staff, as well as visitors and co-patients who might be coming from different cultures with different attitudes and practices in personal hygiene. There are special risk groups, who are more vulnerable to acquire nosocomial infections such as patients in NICU, SCBU, ICU and patients in protective isolation units .

The role of the nurse in controlling infection is very important; there are simple and easy measures such as hand washing, disinfection and sterilization. With early identification of the source and mode of infection in hospital environment according to the policies of the Infection Control Committee in each hospital.

OP85 **Idren in conflict areas 01**

CHID IN WAR CRISIS

Mohamed A Malik, RRCP,FRCPCH
KSA

OP86 **Idren in conflict areas 02**

POSTTRAUMATIC STRESS IN CHILDREN IN CONFLICT AREAS

Fath Alaleem Abdelranim,
Sudan

OP87 **Idren in conflict areas 03**

DANGERS OF LNDMINES IN CHILDREN

Hassan Alobeid,
Sudan

OP8Λ **Idren in conflict areas 04**

CHILDHEALTH SERVICES IN DARFUE

OPΛ٩ **Idren in conflict areas 05**

CHILD HEALTH SERVICES IN SOUTHERN SUDAN

Hassan Solong,
Sudan

PP01 **Cardiology 01**

CARDIAC ABNORMALITIES OF SUDANESE PATIENTS WITH DOWN'S SYNDROME AND THEIR SHORT TERM OUTCOME.

*Sulafa KM Ali, FACC, FRCPCH, **Laila AL Mahdi (MD)
Dept. of Paediatrics, Faculty of Medicine, University of Khartoum,Suda
** Department of Paediatric Cardiology, Sudan Heart Center, Sudan

Background: Congenital heart disease is an important cause of morbidity and mortality in patients with Down's syndrome (DS).
Methods: All patients with DS seen at the Sudan Heart Centre from July 2004 to November 2006 were included in the study. Clinical and echocardiographic examinations were done to all patients and cardiac catheterization was done in selected patients. All patients were prospectively followed up,
Results: In the study period 55 patients with DS were evaluated. Age ranged 2 month to 18 years. Cardiac abnormalities included atrioventricular septal defect (AVSD) in 30 patients (50%) with complete form in 20 ,partial form in 5, AVSD with intact atrial septum in one and complex AVSD in 4 patients . The main other lesions were ventricular septal defect in 11 (20%) and Tetralogy of Fallot in 4 (7%). Cardiac catheterization was done for 4 patients with AVSD, it confirmed the anatomy and showed favorable pulmonary pressures and resistance in all. Only 21% of patients who were in need for surgery were operated on, all had uneventful postoperative course and good outcome at a mean follow up period of one year.The main cause for delay of surgery for those who were operable (33 patients) was small weight accounting for 54%. Ten percent of patients had Eisenmenger's syndrome at the time of presentation.
Conclusion: The pattern of CHD in Sudanese patients with DS is comparable with literature including the rare occurrence of AVSD with intact atrial septum. There is a significant delay in diagnosis and surgery leading to high frequency of Eisenmenger's syndrome. Surgical results and short term follow up are good.

PP02 **Gastroenterology 01**

EOSINOPHILS AND THE ESOPHAGUS
EOSINOPHILIC ESOPHOGITIS... A NEW DISEASE

Aziz Koleilat
Pediatric Department, Director of pediatric residency program.
Makassed University General Hospital, Beirut, lebanon

Esophagitis is one of the complications of GE reflux, and there are similarities in its processes of inflammation as in asthma. Eosinophils play a role in its pathogenesis and complications. There is more than one type of esophagitis where eosinophils play a role.

Eosinophilic Esohagitis belong to Eosinophilic gastroenteritis which was first described over 50 years ago. It is ill-defined and poorly understood entity.

Eosinophilic esophagitis (EE) has features of allergy and immune dysregulation but does not clearly fit into the category of allergic or immune disorder.

Eosinophilic esophagitis (EE), also known as primary eosinophilic esophagitis or idiopathic eosinophilic esophagitis, occurs in adults and in children and represents a subset of EG with an isolated severe oesophageal eosinophilia.

Patients with **EE** present with symptoms similar to those of gastroesophageal reflux but are unresponsive to antireflux medication. Reports have demonstrated that patients with EE respond to either dietary restriction or corticosteroids.

Treatment ad management is a challenge to the paediatrician.

PP03 **Gastroenterology 02**

POLYETHYLEE GLYCOL AS A TREATMENT OF CHRONIC CONSTIPATION IN CHILDREN

Elawad, MA; Burnett, CA; Connolly, SA; Sullivan, PB
Department of Paediatric Gastroenterology, John Radcliffe Hospital, Oxford, UK

Aims: To evaluate the effectiveness, tolerability, complications and long term outcome of PEG in children with difficult chronic constipation

Methods: We prospectively studied 76 children with chronic constipation (>6 month) who failed to respond to conventional methods of treatment. Their mean age was 5.7years (Range between 2-16years). All children were on sufficient dose of stool softener and stimulant laxative for at least six weeks prior to bowel washout. All children were scored (0-15) according to plain abdominal x-ray findings.
The duration until complete evacuation was achieved, maximum rate of infusion and complications encountered during the procedure were recorded. Following evacuation children were discharged home on oral PEG and a stimulant laxative. All children were reviewed after one month.

Results: 68/76(89.5%) children achieved complete evacuation within 3 days. The commonest complication encountered was vomiting 15/76 (19.5). 4/76 (5.2%) children had 3 or more bowel motion per week one-month later. None of children had soiling more than 3 times per week. All children were taking PEG orally.

Conclusion: This is the largest reported study in paediatric demonstrating that PEG can be used effectively, safely and is well tolerated by children with difficult chronic constipation and faecal impaction. When high dose PEG is used for bowel washout, careful monitoring for complication is essential and we therefore suggest that such treatment should be offered in units with good experience with such complication.

PP04 **Haematology 01**

ACUTE SPLENIC SEQUESTRATION CRISIS IN CHILDREN WITH SICKLE CELL DISEASE IN NORTH-WESTERN REGION OF SAUDI ARABIA (ALMADINA AL MUNAWARA)

Zakaria M. Al Hawsawi
Consultant Paediatrician & Paediatric Haematologist / Oncologist, Madina Munawara, K.S.A

Introduction : Acute splenic sequestration (ASSC) crisis is a sudden pooling of a large a mount of blood into the spleen leading to an acute splenomegaly , profound anemia with a decrease of at least 2g/dl from the steady-state hemoglobin concentration, and in severe cases hypovolemic shock , and death may occur . With the recent decline in mortality from pneumococcal sepsis, ASSC has become a leading cause of death in children with sickle cell disease (SCD). The over all incidence of ASSC is variable, ranging from 7.5% to 30%, the incidence of ASSC in the Eastern province of Saudi Arabia is 2% and its of minor type occurring in older children. Acute splenic sequestration has been reported as early as 5 weeks of age, and also in adult, and often associated with viral or bacterial infection. There are no clear risk factors for ASSc, however hemoglobin F level (HBF) at 6 months of age was somewhat lower in children who developed the crisis. Madina Region is located in the Western province of Saudi Arabia, it is one of the major pockets of sickle cell gene, besides the Eastern province and Tehamat Asir Region. The Madina Maternity & Children's Hospital (MMCH) is a 400 bed hospital with 200 bed pediatric section. It is the main referral hospital for the Madina Region. The age limit for pediatric admission is 13 years and the approximate number of children served by the hospital is 350.000 in an estimated population of 800.000.

Aim: To demonstrate the clinical experience with acute splenic sequestration crisis in children with sickle cell disease, followed in Madina Maternity & Children's Hospital, Madina Al-Munawara , Kingdom of Saudi Arabia.

Methods:A retrospective review of hospital case notes of all children with acute splenic sequestration in sickle cell disease , was carried out in the Paediatric Hematology unit at Madina Maternity & Children's Hospital between 1993 through to 2000 .

Results: One hundred and twenty children with sickle cell disease were registered and followed in Madina Maternity & Children's Hospital. Out of these 8 had acute splenic sequestration crisis with prevalence of 7%. Seven were Saudi and one was non-Saudi (Sudanese), 7 had sickle cell anemia and one had sickle B-Thalassemia . The female to male ratio was 3:1,2 patients presented with associated painful crisis . In 50% of the patients, the spleen was not palpable before the attack of acute splenic sequestration crisis. All patients had major splenic sequestration with circulatory collapse, 4 patients (50%) had recurrence and 3 (37.5%) had splenectomy carried out at the age of 2 years. The steady state hematological data did not show any risk factor for acute splenic sequestration crisis and one of our patients died.

Conclusion: Acute splenic sequestration crisis is of relatively high prevalence in the Western Region of the Kingdom of Saudi Arabia , and is of severe type . Management measures recommended are, prevention of sickle cell disease through health education , reduction of consanguineous marriage , implementation of premarital and neonatal screening programs for hereditary blood disease , regular follow up and education of parents to palpate the spleen in an established sickle cell case .

PP05 **Infection 01**

PREVALENCE OF HEPATITIS C VIRUS ANTIBODIES AMONG CHILDREN WITH CHRONIC RENAL FAILURE IN KHARTOUM STATE

Hind A. M. Elansari,* Ilham M Omer (MPCP)
*Gaafer Ibn Ouf Paediatric Hospital, Khartoum, Sudan
**Dept. of Paediatrics, faculty of medicine, University of Khartoum, Khartoum, Sudan

Introduction: Hepatitis C virus infection (HCV) is emerging as the world's predominant cause of chronic liver disease. Variable prevalence of hepatitis C (HCV) infection has been reported in adult patients with chronic renal failure on renal replacement therapy. We studied the prevalence of anti- HCV infection in children in the renal units.

Objectives : To determine the prevalence of anti-HCV antibodies in patients with chronic renal failure, to study the risk factors for acquiring HCV infection and to correlate the presence of anti-HCV antibodies to liver disease activity.

Methods: Records were reviewed for demographic, clinical, biochemical data and risk factors .Sera from 50 patients undergoing haemodialysis, peritoneal or conservative management and 50 control were tested for antibody to HCV by 3rd generation Enzyme – linked immunosorbent assay.

Results: From a total of 50 patients (33 male and 17 female), aged 0-18 yrs, two were anti-HCV positive (4.0%) All the anti-HCV positive patients had been on haemodialysis for a mean of 27 months, while the anti- HCV negative patients had been on dialysis for 15 months ($p<0.003$). All the anti-HCV positive patients had been transfused with 2-8 units, a mean of 5 units ($p<0.000$). No one of them has had prior or recent HBV or HIV infection.

Conclusion: The most predictive risk factor for HCV infection was the length of time on haemodialysis. Three out of the 50 patients had high alanine amino transferase levels. Two were patients with chronic renal failure; one of them was positive while the other was negative for anti-HCV, the third one was in the control group with negative anti-HCV.

PP06 **Metabolic/Endocrine 01**

CEREBRAL EDEMA WITH PAEDIATRIC DIABETES KETOACIDOSIS: WHO IS AT RISK?

Mohamed S. Al Maghamsi
Consultant Paediatric Endocrinologist, Madina Maternity and Children's Hospital
Madina Munawara, KSA

Cerebral edema is an uncommon but devastating complication of diabetic ketoacidosis in children, occurring in 1% to 5% of DKA episodes. The rates of mortality and permanent neurological morbidity from this complication are high. Risk factors for this complication have not been clearly defined. Many theories have been advanced to explain brain swelling in association with DKA, including over zealous rehydration with hypotonic intravenous fluids, the rapid reduction of blood glucose with insulin, activation of the Na/H transporter system, change in oncotic pressure, increase permeability of the blood-brain barrier and change in cerebral blood flow. Diagnosis of this dangerous complication of DKA depends on clinical awareness; the diagnosis may be confirmed by CT scan.

Management is still controversial and remains empirical. The literature is reviewed and some aspects of therapy which might be casually related to cerebral edema observed in association with therapy of diabetic ketoacidosis are discussed.

PP07 **Metabolic/Endocrine 02**

NEWBORN METABOLLIC SCREENINGFROM THE SPOT TO DIAGNOSIS AND MANAGEMENT

Sarar Mohamed FRCPCH, MD
Dublin, Ireland

Newborn screening is one of the most successful and cost-effective programs in the history of medicine. It prevents learning difficulty and decreases childhood morbidity and mortality. No newborn should be denied the opportunity for such a life saving medical intervention

The Objectives of the newborn screening program is to identify affected infants with genetic diseases before development of symptoms and signs.

The Principles of Newborn Screening are:

- Disease screened has to be treatable
- Test should be sensitive and specific

Disorders Detectable by Screening

- Aminoacidopathy
- Fatty acid oxidation defects
- Organic aciduria
- Endocrinopathies
- Haemoglobinopathies

Screening technique

- Specimen is a blood spot obtained by heel brick and collected in a filter paper
- Blood compounds undergo ionization
- Ions subjected to mass spectrometry
- Metabolites characteristics of AA &OA are identified using isotopes labeled standard

Cost

- Screening costs some money
- Benefits of early detection outweigh cost
- Cost-benefit analysis should not ignore the cost in human terms of not identifying and treating these devastating conditions

Concerns

- False positive results generate anxiety
- Some disorders become symptomatic before results of the test become available False negative results may occur

PP08 **Rheumatology 01**

POLYARTERITIS NODOSA (PAN) MIGHT BE MISDIAGNOSED AS FAMILIAL MEDITERRANIAN FEVER

Bassam Saeed.
Pediatric Nephrologist. Pediatric Nephrology Division Surgical Kidney Hospital.
Damascus – Syria

Mohamad is a 9 years old boy known to have familial Mediterranean fever since a year due to recurrent attacks of abdominal pain with fever and elevated serum Fibrinogen level and being treated with Colchicines. He did not improve at all but rather deteriorate during the last several weeks prior to his first presentation to our center in April 2006 with a long lasting and refractory abdominal pain, polyarthritis involving ankles, knees, and wrists, myalgia, purpuric rashes, anorexia, vomiting, asthenia, and substantial weigh loss. He was very sick, highly febrile, tachycardic, BP120/80, pale, resolving purpuras on lower limbs, malnourished, fully conscious, generalized abdominal tenderness.

Endocarditis could be eliminated by sterile blood cultures and absence of endocardial vegetations. Active Urine sediment with high ESR an elevated fibrinogen. Normal C3 and C4 blood level. ANA, ANCA, Anti GBM, and Anti DNA antibodies were negative. The differential diagnosis included HSP, Amyloidosis, and other glomerulopathies. A kidney biopsy has been performed and showed very interesting findings: the arterioles show acute vasculitis with fibrinoid necrosis of the wall consistent with either pallor Henoch-Schowenlein purpura. A selected renal arteriography has been done and shown numerous aneurisms involving almost all the inter-lobular arteries and also the inferior mesenteric arteries. Thus, the diagnosis of PAN is now well established and confirmed. Actually such a diagnosis in itself constitutes a contraindication to perform such an invasive procedure since it may carry on the risk of puncturing aneurisms. Such a complication, thanks god did not happened.

We managed this case with the following therapeutic protocol: Cyclophosphamide IV then PO and steroid for 3 months then we reduced steroid dosage and replaced cyclophosphamide with Azathioprine. The child dramatically responded and he is doing very well.

PP09 **Community 01**

TO ERR IS HUMAN

Mohamed Bayari, MD
Casablanca, Morocco

The millennium's medicine profited from technological advances and robotization; nevertheless, such a progress did not gum the risk of error in our exercise. Medical interventions though aiming at the wellbeing of the patients can be noxious and this on all levels of the chain of care (hospital, doctor, nurse...). The last decades knew a public and medical passion for the risk of medical errors and the quality of care to the patients.

A care to a patient is done according to a long process starting with the maturation of a reflexion as for a drug and its dosing or a technique until the moment of its realization and well beyond, its evaluation; many are actors of such an initiative.

Moreover, our practices do not seem to be equal as for the risk to generate an error; thus, the emergency departments (overcrowding, limitation of the means) and intensive care units (high volume of decisions, high cognitive charges, rate/rhythm of extended-duration work shifts of residents...) are in the foreground of the risks. This is more evident in paediatric age since the child is thought to be 3 times risky to be the subject of such an error comparatively to adults.

The attitude of the blame is rooted in our behaviors and it would be illusory to think of erasing it easily; there is no magic way. However, it will have to be exceeded to concentrate efforts on the primary causes of error and the research of the weaknesses of the system.

These errors are classified by type, seriousness and its foreseeability; to date, there is not universal "gold standard" approach.
Various branches of industry (firemen, airline pilot...) are concerned to the first chief by these incidents; the review of the literature finds an approach which it is possible to apply to the medical world. Various tests are leaning on the causes and different standard from frequently listed errors and made an internal detailed analysis; in the light of these introspective analyses, proposals were formulated in order to reduce this risk to a minimum. Thus, the regulation computer-assisted proved one of the relevant means to improve efficiency of caregivers and to reduce the risk of errors; however, the absence of specifically paediatric support makes it less helpful (calculators for continuous perfusions, paediatric dosing, gestational age....). Rigorous rules of management, appreciation, training by the questioning... as well as the banishment of the principle of blame are as much of prerequisite for better serving our patients.

PP10 **Community 02**

SAFE MEDICATION PRACTICE

Yousif Ishag Omer Al Hag
Consultant Paediatrician, King Abdulaziz National Guard Hospital
Alahsa, KSA

Medication errors compromise patient confidence in the health care system. Errors occur from lack of knowledge, substandard performance, mental lapses or defects in systems. Medication errors may be committed by both experienced and inexperienced staff including physicians, pharmacists, nurses and supportive personnel (ward clerks, students), administrators, pharmaceutical manufacturers, patients and their care givers.
Medication errors include inappropriate prescribing, patient non-compliance, communication problems, dispensing errors and medication administration errors. Many medication errors are undetected. However, some medication errors are tragic and result in serious patient morbidity and mortality.
Medication errors are not uncommon. Different studies on medication errors have lots of differences in variables, measurements, populations and methods used. The pharmacy mission is to help ensure that patients make the best use of medications. This presentation suggests medication error prevention approaches that should be considered in health systems and discusses methods of managing medication errors once they have occurred.

PP11 **Nephrology 01**

PECULIAR PATTERN OF NEPHROTIC SYNDROME IN A CHILD WITH HEPATITIS C NEPHROPATHY WHO SUBSEQUENTLY REPONDED TO STEROID THERAPY.

Bassam Saeed.
Pediatric Nephrologist. Pediatric Nephrology Division Surgical Kidney Hospital. Damascus - Syria.

An eleven years old girl from Aleppo presented to us in December 2004 with a full-blown nephrotic syndrome being treated with steroid for the last 6 months without any response so we have categorized her as steroid-resistant and we decided to perform kidney biopsy which has shown minimal change disease. Before considering further immunosuppression we checked her for hepatitis B and C serology. The anti HCV antibodies were positive. So we did a full assessment of her liver status: HCV genotyping: IV. HCV RNA PCR positive: 2.610.000 copies/ml. Liver biopsy: The portal spaces show very mild heterogenous leukocytic infiltrate composed mainly of mature lymphocytes. Compatible with HCV carrier status. Then we tapered off steroid over a 2 weeks period and we started Pegilated Interferon (Pegasys®) 180 mcg / week / sub. cut. combined with Ribavarine 200 mg twice daily. One month later she was in complete remission. 3 months

later, her HCV – RNA – PCR was negative. then we continued her treatment for 48 weeks during which she continued to be relapse-free. Then we discontinued Pegasys® and Ribavarin® . 6 months later she relapsed. we rechecked her HCV –RNA – PCR it came negative then we treated her with steroid according to the ISKDC regimen. 4 weeks later she has no proteinuria at all so again she was categorized as steroid – responsive nephrotic syndrome. We tapered off steroid over a period of 8 weeks at the end of which we stop it, since then she is off steroid and still in remission.

PP12 **Neurology 01**

EFFECT OF ANTIEPILEPTIC DRUGS ON THYROID FUNCTION IN EPILEPTIC SUDANESE CHILDREN

*Salwa Elsir Obeid(MBBS),** Eltahir M. Elshibly(MD, MPH Harvard, FRCPCH)
*Khartoum Teaching Hospital, Khartoum, Sudan
**Department of Paediatrics, Faculty of Medicine, University of Khartoum, Khartoum, Sudan

Aim: To study the effect of antiepileptic drugs on the thyroid function.
Methods: This is a cross-sectional hospital based study, it was conducted in Gafaar Ibn Out and Omdurman Children's Emergency Hospital referral clinics, in the period from April – July 2006.The total of 67 children with epilepsy, aged < 16 yrs and 30 healthy children were taken as control, males were predominant (68.7%). 56 patients were on CBZ and 11 patients were on VAP.All children in the study group were surveyed and investigated for thyroid function by measuring serum T4, T3 and TSH levels.
Results: CBZ group had significantly low serum T4 level (P = 0.00) and significantly higher T3 level (0.04) than control group.TSH level had insignificant from control group. VAP group had insignificant difference from control.Serum T4 level in CBZ group affected by age but not affected by sex, origin and duration of treatment.Serum T3 level in CBZ affected by duration of treatment, but nor affected by sex, age or origin. Almost all patients were clinically euthyroid.

PP13 **Respiratory 01**

IMPORTANCE OF THROAT EXAMINATION IN DIAGNOSING AND TREATING CHILDREN: A CLINICAL STUDY IN WHITE NILE AREA

Eltigani Hassn Mohamed, MD
Department of Paediatrics. Faculty of Medicine, Imam Almahadi University, Sudan

About 600 patients with sore throat in the period from June-December 2006 were studied. It is a clinical-based study with examination of children with sore throat(congestion, with or without pus formation).
Complaints of patients were written and presented as follows:
Fever 419 (70%), Cough 377 (62%), Diarrhoea 227 (37%), Vomiting 163 (27.1%), Abdominal pain 69 (11.5%), skin rash 35 (5.8%), shortness of breath 21 (3.5%), burning micturition 21 (3.5%).
Most of patients had 2 complaints, the most common being fever and cough. Diarrhea and vomiting presented in 92 cases (15.3%). Importance of diagnosis of sore throat in association with other complaints helps in the treatment. Symptomatic treatment is not enough, antibiotics are needed for quick relieve of fever and other complaints. Azithromycin is superior to other antibiotics in treatment of pharyngitis(This is observed by follow-up of patients).

اليـوم	الغداء	العشاء
الثلاثاء ١٣ نوفمبر	صالة أمسيتي – شارع عبيد ختم برعاية : شركة fast	فندق السلام روتانا برعاية : شركة نستلى
الأربعاء ١٤ نوفمبر	هلتون الخرطوم برعاية: شركة المهدي قلوبال	نادي النفط - برعاية: جمعية اختصاصي طب الأطفال السودانية
الخميس ١٥ نوفمبر	هلتون الخرطوم - برعاية: جمعية اختصاصي طب الأطفال السودانية	نادي الشرطة برعاية: السيد وزير الداخلية

البرامج المصاحبة للمؤتمر

- يوم ١٢ نوفمبر الافتتاح بفرقة أنا السودان وأطفال السكري.
- فرقة تيراب الكوميديا مصاحبة لغداء يوم ١٣ نوفمبر.
- عشاء يوم ١٣ نوفمبر بصحبة فرقة عقد الجلاد.
- غداء يوم ١٤ نوفمبر بصحبة فرقة البالمبو.
- عشاء يوم ١٤ نوفمبر و Gala Night.
- عشاء الجمعية يوم ١٥ نوفمبر بصحبة الموسيقار د. الفاتح حسين.

الزيارات الترفيهية والتعريفية

- أيام الثلاثاء والأربعاء والخميس (بيت الخليفة- سوق أم درمان، الطابية، متحف السودان، متحف التاريخ الطبيعي، Khartoum Tour - رحلة حول الخرطوم-، رحلة نيلية). تتحرك الباصات من أمام قاعة الصداقة يوميا الساعة الواحدة ظهرا.
- يوم الجمعة زيارة لسد مروي وعلي الراغبين التسجيل لدى سكرتارية المؤتمر يوم الثلاثاء ٢٠٠٧/١١/١٣.

- **د. علي عربي - رئيس**
- د. أماني قنديل
- د. عطيات مصطفى
- د. محمد عثمان متوكل
- د. محمد بابكر عبد الرحمن
- د. كمال محمد خير
- د. بخيتة عطا الله
- د. منتصر طه
- د. إبراهيم عبد القادر
- د. بشير مختار الوسيلة
- د. علي عبد الله
- د. خالد سيد أحمد

اللجنة المالية

- **أ.د. مبيوع مصطفى رئيس**
- د. إلهام محمد عمر
- د. يونس عبد الرحمن
- د. الأمين عثمان سيد أحمد
- د. التجاني محمد أحمد
- د. كريم الدين محمد صلاح
- د. غادة شيخ الدين
- د.عبد المنعم علي
- د. أحمد الفاضل
- د. منيرة خان
- د. نور الهادي عطا الله
- د. سارة عبد السلام
- د. حسين عبده
- د. عرفات عبد الرحمن
- د. هند عبد الرحمن
- د. نجلاء إبراهيم محمد
- د. أماني عبد الحميد نوري
- د. ياسر محجوب
- د. مدثر حمد
- د. عبد المنعم بانقا

الاستقبال و الدعوات

- **أ.د. صلاح أحمد إبراهيم - رئيس**
- د. بابكر المبشر
- د. أماني عبد الحميد نوري
- د. منى بابكر
- د. مها جاد الله
- د. غادة حسين
- د. عمر الشريف
- د. سعد حمد
- د. سهام أحمد حسب الرسول
- د. راشد اللدر
- د. خالد سيد أحمد
- د. تماضر النور
- د. معتز عبد الله شريف
- د. وئام عربي
- د. حسين عبده
- د. أحلام أحمد عبد الرحمن
- د. صفاء عبد الحميد
- د. يوسف مختار

اللجنة التنظيمية

- **رئس المؤتمر :أ.د. صلاح أحمد إبراهيم**
- **نائب رئيس المؤتمر:أ.د. مبيوع مصطفى**
- **الأمين العام :د. علي عربي**

لجان المؤتمر

اللجنة العلمية

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- أ.د. عزيز قليلات
- أ.د. حافظ الشاذلي
- أ.د حسن محمد أحمد
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- أ.. عبد الرحمن المفتي
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- د. إبراهيم قمر الدولة
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- د. يحيى شاكر عبد القادر
- د. سراج محمد خير
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- د. محمد زين سيد أحمد
- د. التجاني محمد أحمد
- د. محمد خليل

اللجنة التنفيذية:

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- الرئيس المنتخب: أ.د. مبيوع مصطفى عبد الوهاب
- السكرتير العام: د. علي عربي
- مساعد السكرتير العام: د. أماني قنديل
- السكرتير الأكاديمي: د. إبراهيم قمر الدولة
- مساعد السكرتير الأكاديمي: أ.د. عيسى الأمين
- السكرتير المالي: د. إلهام محمد عمر
- مساعد السكرتير المالي: د. كريم الدين محمد
- السكرتير الاجتماعي: يونس عبد الرحمن إسحق
- مساعد السكرتير الاجتماعي: د. روزا أجاك
- محرر المجلة: أ.د.علي حبور
- مساعد المحرر: د. بخيتة عطا الله

رواد ومستشارو الجمعية :

- أ.د. حافظ الشاذلي
- أ.د. سيدة بشار
- أ.د. محمد إبراهيم علي عمر
- أ.د. حسن محمد أحمد
- د. أحمد حسب الرسول
- د. خليفة عبد الرحيم
- د. مأمون يوسف
- د. فضل الله الجاك
- د. يحيى عمر حمزة
- د. عثمان عوض الكريم
- د. إبراهيم مغربي
- د. رابح بربر
- د. حسن عثمان عمر
- د. أحمد إبراهيم مختار
- أ.د. جعفر بن عوف سليمان
- د. الخير أحمد عبد القادر
- أ.د. أحمد حامد العبادي
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- د. علي الخضر
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- أ.د. عبد الوهاب الإدريسى
- د. أسعد تاج الدين العباس
- د. محمد سر الختم هاشم
- د. بلة عوض السيد

مجلس الإتحاد

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أمين عام الإتحاد: أ .د. احمد السعيد يونس
الخازن: أ.د. منذر شيخ الحدادين
رئيس المؤتمر السابق: أ.د. حسين كامل بهاء الدين

رؤساء الجمعيات العربية لطب الأطفال بالدول حسب الحروف الأبجدية

الأردن: د.علي محمد الحلبي	الأمارات: د. شهربان عبد الله
البحرين: د. علي إبراهيم سلمان	تونس: أ.د. أحمد السوسي
الجزائر: أ.د. بن سنوسي	السعودية: أ.د.عبد الرحمن بن عبد العزيز السويلم
السودان : أ.د. صلاح أحمد إبراهيم	سوريا : أ.د. محمود فتح الله
العراق : أ.د. نجم الدين الروزنامجي	فلسطين: أ.د. أمين تلجي
الكويت: أ.د.عبد الله الراشد	لبنان: أ.د. جورج حاج
ليبيا: أ.د. منصور الموهوب	مصر: أ.د.حسين كامل بهاء الدين
المغرب: أ.د.سعيد عفيف	اليمن: أ.د. عبد الكريم يحيى راصع

المؤتمر السنوي لإتحاد الجمعيات العربية لطب الأطفال

الأول	مصر	١٩٨٩	الثاني	مصر	١٩٩٠
الثالث	مصر	١٩٩١	الرابع	تونس	١٩٩٣
الخامس	الأردن	١٩٩٥	السادس	سوريا	١٩٩٨
السابع	مصر	١٩٩٩	الثامن	لبنان	٢٠٠٠
التاسع	السعودية	٢٠٠١	العاشر	الأردن	٢٠٠٢
الحادي عشر	البحرين	٢٠٠٣	الثاني عشر	لبنان	٢٠٠٥
الثالث عشر	اليمن	٢٠٠٦	الرابع عشر	مصر	٢٠٠٦
الخامس عشر	السودان	٢٠٠٧			

اجتماع مجلس الإتحاد

سوف يعقد الاجتماع الدوري لمجلس بقاعة الاجتماعات بفندق هلتون في تمام الساعة الواحدة ظهر يوم الأربعاء ٢٠٠٧/١١/١٤ م.

لقد تم الاتفاق في دمشق عام ١٩٧٢ على إنشاء اتحاد لجمعيات أطباء الأطفال العرب بحيث تتمثل أنشطته:عقد مؤتمر سنوي في الدول الأعضاء بالتناوب، يبحث فيه مشاكل الطفل العربي والعمل على تأدية أفضل الخدمات الطبية للأطفال العرب سواء منها الوقائية أو العلاجية، وقد أيد وزراء الصحة العرب ذلك القرار وأطلق اسم (يوم الطفل العربي) على هذه المؤتمرات التي كانت تتم فعليا برعاية وزارات الصحة.

وقد تم عقد أيام الطفل العربي في كل من مصر والمغرب والجزائر وتونس وليبيا والسودان والبحرين وسوريا والأردن، ولم تتخذ هذه الأيام فعليا مفهوم إتحاد الجمعيات لأن هذه الجمعيات لم تشارك بشكل فعلي ولم تساهم فعليا في التحضر لهذه المؤتمرات، بل اختصر الأمر على دعوات من وزارات الصحة لعقد يوم الطفل العربي ويحضره غالبا ممثلون عن وزارات الصحة وبقي الأمر كذلك حتى عام ١٩٨٨، موعد انعقاد يوم الطفل العربي في دمشق والذي تزامن مع عقد مؤتمر جمعيات أطباء الأطفال لحوض البحر المتوسط و الشرق الأوسط وكانت مناسبة ملائمة لإحياء فكرة إتحاد جمعيات أطباء الأطفال العرب، حيث أن كافة الجمعيات العربية كانت ممثلة. وعقد اجتماع لرؤساء جمعيات أطباء الأطفال العرب و الممثلين عنهم واعتبر هذا الاجتماع اجتماعا تأسيسيا ووضع قرار الهيئة العامة للإتحاد موضع التنفيذ في ١٨ سبتمبر ١٩٨٨ بشأن النظام الأساسي للإتحاد. وأعتبر ممثلو الجمعيات الذين حضروا اجتماع التأسيس هم أعضاء مؤسسون ويشكلون الهيئة العامة للإتحاد، وقد تم الاتفاق آنذاك على أن يعقد المؤتمر الأول في القاهرة.

ثم تتابعت المؤتمرات وظلت تعقد دوريا كل عام في إحدى البلاد العربية تحت مظلة

إتحاد الجمعيات العربية لطب الأطفال

.Union of Pan Arab Paediatric Societies

وقد انبعثت منها عدة روابط متخصصة في شتى المجالات كالروابط العربية لأطباء أعصاب الأطفال والمواليد حديثي الولادة والجينات والأمراض الوراثية والقلب والأمراض المعدية والسارية وأمراض الجهاز الهضمي والتغذية عند الأطفال .... وغيرها.

وعندما انعقد المؤتمر الثالث عشر في عدن (اليمن) في مارس ٢٠٠٦ أجمع أعضاء مجلس الإدارة على تغير اسم الإتحاد ليصبح

إتحـــاد أطبـــاء الأطفـــال العـــرب

Union of Arab Paediatricians (UAP)

وهذه هي المرة الأولى التي يتشرف السودان باستضافة الإتحاد، فأهلا ومرحبا، والله أسأل أن يكون مؤتمر الإتحاد حافلا وفاعلا ويعود نتاجه نفعا و نصرة للأمة العربية.

شكر و تقدير

تتقدم جمعية اختصاصيي طب الأطفال السودانية بالشكر والتقدير **لرئاسة الجمهورية** لدعمها السخي ورعايتها للمؤتمر.

كما تتقدم بالشكر والتقدير لكل الجهات الداعمة للمؤتمر على ما قدمته من مساهمات كان لها الأثر في إنجاح المؤتمر.

رئاسة الجمهورية	والي ولاية الخرطوم
وزارة الصحة الاتحادية	وزارة الداخلية
وزارة السياحة والحياة البرية	شركة نستله
شركة المهدي قلوبال	شركة فاست العالمية
شركة الحكمة للأدوية	السيد / جمال الوالي
بنك السودان (الرئاسة)	جامعة الخرطوم
جامعة الجزيرة	جامعة إفريقيا العالمية
جامعة السودان	جامعة كسلا
اتحاد نقابات عمال السودان	جهاز تنظيم شؤون السودانيين العاملين بالخارج
شركة الفرات الطبية	شركة سوار الذهب الطبية
شركة أعمال نديم الصيدلانية	شركة جلاسكو سمث كلاينت
شركة بتروناس	الشركة المتطورة الأردنية
شركة سكر كنانة	شركة شيكان للتأمين
شركة أسرار الطبية	الشركة الدولية للدواء
الشركة الأدوية العامة	صندوق إعانة المرضى الكويتي
مستشفى جعفر بن عوف التخصصي للأطفال	شركة ديكور هاوس
شركة المهدي الطبية	شركة الشرق الأوسط
السيد / أمين أحمد حسب الرسول	السيد / محمد إسماعيل محمد
شركة هجليج للبترول	شركة فارما التجارية
شركة سيجما تاو سودان	شركة التوكيلات الطبية
البنك السوداني الفرنسي	بنك المزارع التجاري
بنك تنمية الصادرات	مركز الخرطوم التشخيصي التخصصي
مستشفى حوادث الأطفال ام درمان	شركة هبة للأدوية
شركة أجيال الطبية	شركة سيسوبا للأدوية
شركة دال الطبية	شركة الواحة الطبية
بنك الشمال الإسلامي	شركة الرازي الطبية
شركة ليلم للخدمات الطبية	

كلمة ترحيب

بسم الله الرحمن الرحيم

مرحباً بالإخوة الكرام العلماء وأطباء الأطفال والإخوة المهتمين بصحة الطفل العربي. مرحباً بكم في أرض السودان، وفي الخرطوم ملتقى النيلين وملتقى الثقافات العربية والإفريقية منذ القدم.

نجتمع في هذه الدورة لاستقراء واقع الطفل العربي حاضره ومستقبله، وإنها لجد مناسبة نادرة، ووقفة تأملية مهمة نحتاجها لمدارسة حال الطفل الذي تتباين أوضاعه ومشاكله في عالمنا العربي.

إن من صلب أهداف مؤتمركم هذا الوقوف على أحدث التطورات العلمية في مجال طب الأطفال وتبادل الخبرات، وتدارس علل ومشاكل الطفولة، ومناقشتها بالبحث والتدقيق، وإيجاد طرق معالجتها ثم الدفع بها و المنافحة عنها عند جهات اتخاذ القرار وذلك لخلق آثار إيجابية لترقية حاضر الطفل العربي ومستقبله علمياً وصحياً ونفسياً واجتماعياً، والنهوض به ليلحق بمسار رصفائه في العالم المتقدم متميزاً وقادراً على خدمة شعبه والدفع بأمته إلى الأمام.

وإن من أهداف المؤتمر أيضاً تدعيم الروابط وخلق صلات جديدة بين الأعضاء والجمعيات آملين أن تتكامل الخدمات الصحية والطبية بين شعوبنا وأن تتم الاستفادة القصوى من الخبرات الثرة في الوطن العربي.

لكم جزيل الشكر من أهل السودان لتكبدكم الصعاب لحضور هذا المؤتمر الخامس عشر للإتحاد من أجل طفولة سليمة آمنة ومجتمع تكافلي راق وكلي ثقة في أن اجتماعكم الطيب هذا سيؤتي أكله بإذن الله.

نشكر رئاسة الجمهورية لمساندتها ورعايتها للمؤتمر ودعمها السخي. والشكر موصول لكل من ساهم في قيام المؤتمر.

وبالله التوفيق

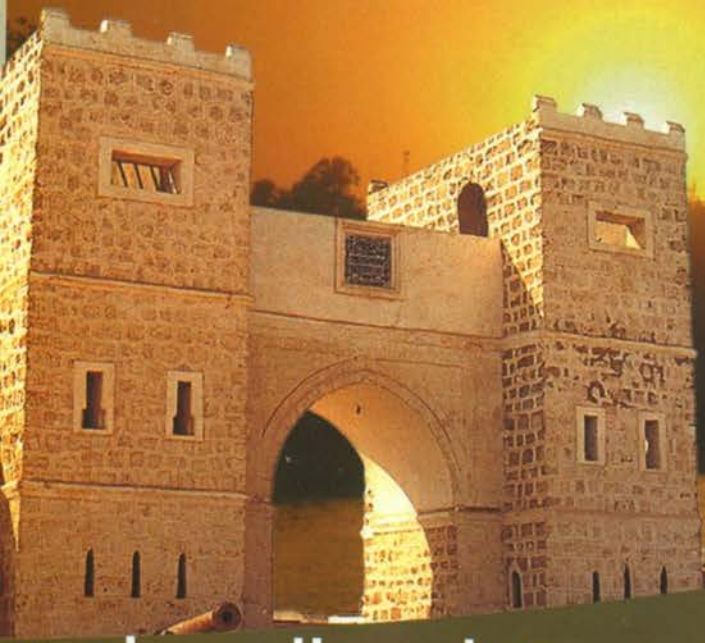
أ.د. صلاح أحمد إبراهيم

رئيس إتحاد أطباء الأطفال العرب

تحت رعاية
السيد نائب رئيس الجمهورية
الاستاذ علي عثمان محمد طه

المؤتمر الخامس عشر
لإتحاد أطباء الأطفال العرب

اتحاد أطباء الأطفال العرب
بالتعاون مع
جمعية إختصاصيي
طب الأطفال السودانية



البرنامج و الملخصات

قاعة الصداقة
الخرطوم - السودان
١٢ - ١٥ نوفمبر ٢٠٠٧

المؤتمر العاشر للرابطة العربية لأمراض جهاز الهضم والتغذية عند الأطفال

The 15th Congress of the Union of Arab Paediatricians

المؤتمر الخامس عشر لجمعية إختصاصيي طب الأطفال السودانية