



The Hong Kong Society of
Child Neurology and Developmental Paediatrics

ANNUAL SCIENTIFIC MEETING 2011

18 – 21 November 2011 • Hong Kong

“Paediatric Neuro-Radiology”

Programme Book





**The Hong Kong Society of
Child Neurology and Developmental Paediatrics**

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• Programme-at-a-Glance

Date	Time	Session	Topic	Speaker
18 Nov 2011 (FRI)	1830 – 2000	Registration and Light Buffet Dinner		
	2000 – 2200	Seminar I	Imaging of normal and abnormal brain development	Prof. Paul Griffiths (UK)
19 Nov 2011 (SAT)	1330 – 1400	Registration		
	1400 – 1500	Seminar II	Pre and post natal development of the cerebral hemisphere	Prof. Paul Griffiths (UK)
	1500 – 1530	Coffee Break		
	1530 – 1730	Local Presentation I	Navigation in neurosurgery	Dr. John Kwok (KWH)
			Imaging of paediatric stroke	Dr. Wendy Lam (QMH)
		The application of brain imaging in epilepsy – a child neurologist perspective	Dr. Wai-kwong Chak (TMH)	
20 Nov 2011 (SUN)	0900 – 0930	Registration		
	0930 – 1030	Seminar III	The role of fetal MR in detecting brain abnormalities	Prof. Paul Griffiths (UK)
	1030 – 1130	Free Paper Presentations	The effect of Taekwondo training on balance and sensory organization in children with developmental coordination disorder: a randomized controlled trial	Ms. Shirley Fong (HKPU)
			New Chinese reading acuity charts for Hong Kong Chinese children	Ms. Josephine Cheung (CAS)
			A randomized controlled trial to compare the effects of directive and non-directive parenting programmes	Mr. Stanley Chan (HKPU)
			Speech recognition ability of children with High Frequency Sensori-neural Hearing Loss (HFSHL) using the Cantonese Hearing in Noise Test (CHINT)	Ms. Sandra Wong (CAS)
			Effectiveness of structured home-based somatosensory training programme for improving attention on preschool children with Autistic Spectrum Disorder (ASD)	Ms. Carmen Cheng (SAHK)
	1130 – 1200	Coffee Break		
	1200 – 1300	Seminar IV	Imaging of the phakomatoses	Prof. Paul Griffiths (UK)
	1300 – 1400	Light Buffet Lunch		
	1400 – 1445	Local Presentation II	Neuro-surgical case discussion	Dr. Dawson Fong (TMH)
	1445 – 1530	Case Presentations	A 10 years old girl with right cerebral atrophy and leptomeningeal angioliomatosis	Dr. Kam-hung Ma (AHNH)
			Case sharing	Dr. Grace Ng (PMH)
	1530 – 1600	Coffee Break		
	1600 – 1700	Seminar V	Advances in neonatal brain MR	Prof. Paul Griffiths (UK)
21 Nov 2011 (MON)	1830 – 1900	Registration		
	1900 – 2000	Keynote Lecture	An approach to imaging children with cerebral palsy	Prof. Paul Griffiths (UK)
	2000 – 2200	Chinese Banquet		

Venues:

18 – 20 Nov 2011:

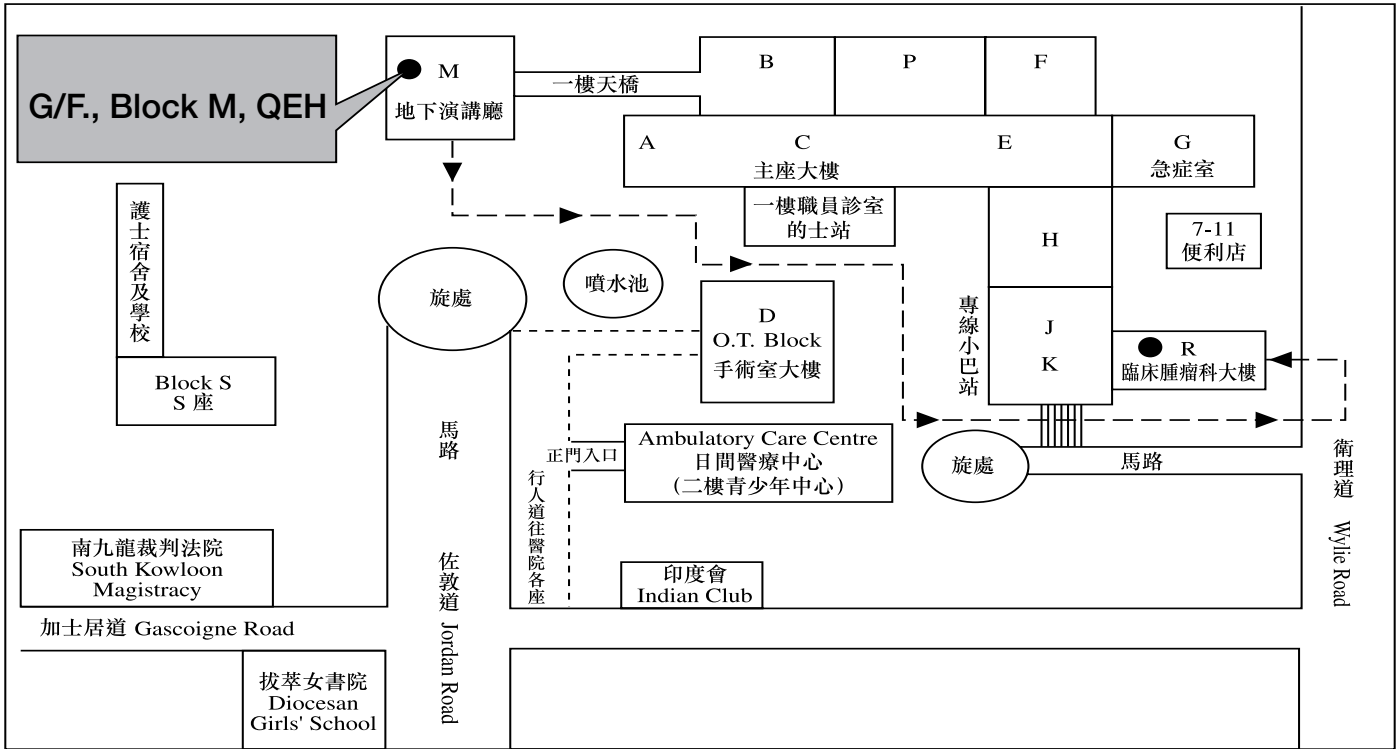
Lecture Theatre, G/F., Block M, Queen Elizabeth Hospital, 30 Gascoigne Road, Jordan

21 Nov 2011:

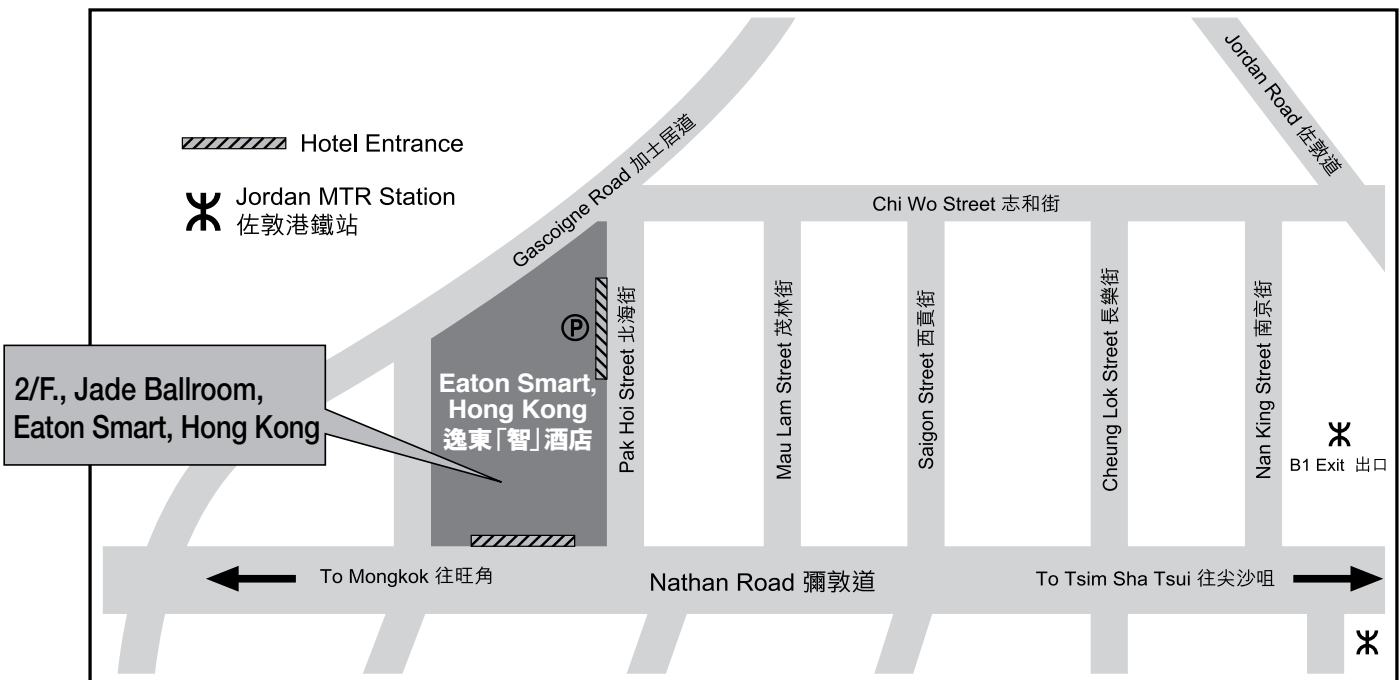
Jade Ballroom, 2/F., Eaton Smart, Hong Kong, 380 Nathan Road, Jordan

Venues

Queen Elizabeth Hospital 伊利沙伯醫院 18 – 20 November 2011



Eaton Smart, Hong Kong 香港逸東「智」酒店 21 November 2011



• Welcome Message



We are pleased that our Annual Scientific Meeting for this year will be held on 18 – 21 November 2011 at the Queen Elizabeth Hospital and Eaton Smart, Hong Kong. The theme for the meeting this year is “Paediatric Neuro-Radiology”. We are privileged to have Professor Paul Griffiths from the United Kingdom as our Course Director to deliver lectures covering important aspects of this condition.

Professor Paul Griffiths is a world-renowned specialist on the subject. He has been the Professor of Radiology at the University of Sheffield since 1996. He did his undergraduate and Radiology training in Manchester as well as his PhD in Experimental Neurology. He completed his subspecialty training in Neuroradiology in Newcastle and then worked at the Hospital for Sick Children, Toronto as their first International Neuroradiology Scholar in 1994. He is a paediatric neuroradiologist with major research interests in the field of developing brain and spine.

Based on his immense experience on the subject, Professor Griffiths is going to give us a series of first hand information and knowledge on the cutting edge of Paediatric Neuro-Radiology. In addition to Professor Griffiths we shall also be hosting local experts from the fields of radiology, neurosciences and paediatrics, to share with us their latest research, both basic and clinical, and the most up-to-date information in this area, which will be of interest to specialists and professionals alike. With such good collection of speakers and knowledgeable audience, we are anticipating a stimulating meeting of minds which will surely bear fruitful results to shed lights and directions on the subject of Paediatric Neuro-Radiology by professionals in our Community.

I would like to take this opportunity to thank Queen Elizabeth Hospital for providing us with the meeting venue, and to express my gratitude to the following key figures for contributing to the success of this Annual Scientific Meeting: Dr. Wai-kwong Chak, Dr. Catherine Lam, Dr. Stephenie Liu, Dr. Kwing-wan Tsui, Dr. Theresa Wong, as well as all speakers at the Meeting. Special thanks are due to Wyeth Hong Kong Limited for their support via an Educational Grant as well as to Ms. Melissa Leung and Ms. Sigourney Liu of UBM Medica Pacific Limited for their efficient organization of this Meeting. Most important of all, I would like to thank all members for their support and all registrants for their active participation which are always vital for the success of this Meeting. For all your support, I say thank you and I look forward to having your continual support in all future activities of our Society.

I wish you all a fruitful and enjoyable Annual Scientific Meeting 2011!



Dr. Chok-wan Chan

President

Hong Kong Society of Child Neurology & Developmental Paediatrics

• Council Members



The Hong Kong Society of Child Neurology and Developmental Paediatrics (2010 – 2012)

President:	Dr. Chok-wan Chan
Vice President:	Dr. Catherine Chi-chin Lam
Honorary Secretary:	Dr. Stephenie Ka-yee Liu
Honorary Treasurer:	Dr. Theresa Yee-ling Wong
Council Members:	Dr. Wai-kwong Chak Dr. Sharon Wan-wah Cherk Dr. Tim Kam-tim Liu Dr. Kwing-wan Tsui Dr. Eric Kin-cheong Yau Dr. Sam Chak-ming Yeung
Co-opt Council Member:	Dr. Florence Mun-yau Lee

• Organizing Committee

Members:	Dr. Wai-kwong Chak Dr. Catherine Chi-chin Lam Dr. Stephenie Ka-yee Liu Dr. Kwing-wan Tsui Dr. Theresa Yee-ling Wong
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• Course Director



Paul Griffiths has been the Professor of Radiology at the University of Sheffield since 1996. He did his undergraduate and Radiology training in Manchester as well as his PhD in Experimental Neurology. He completed his sub-speciality training in Neuroradiology in Newcastle and then worked at the Hospital for Sick Children, Toronto as their first International Neuroradiology Scholar in 1994. He is a paediatric neuroradiologist with major research interests in the developing brain and spine.

• Faculty Members

Name	Affiliation
Dr. Wai-kwong Chak	Associate Consultant Department of Paediatrics and Adolescent Medicine Tuen Mun Hospital
Dr. Chok-wan Chan	Specialist in Paediatrics
Dr. Dawson Fong	Chief of Service Department of Neurosurgery Tuen Mun Hospital
Dr. John Kwok	Chief of Service Department of Neurosurgery Kwong Wah Hospital
Dr. Catherine Lam	Consultant Child Assessment Services Department of Health
Dr. Wendy Lam	Consultant Department of Radiology Queen Mary Hospital
Dr. Stephenie Liu	Senior Medical Officer Child Assessment Services Department of Health
Dr. Tim Liu	Associate Consultant Department of Paediatrics and Adolescent Medicine Pamela Youde Nethersole Eastern Hospital
Dr. Kam-hung Ma	Associate Consultant Department of Paediatrics and Adolescent Medicine Alice Ho Miu Ling Nethersole Hospital
Dr. Grace Ng	Associate Consultant Department of Paediatrics and Adolescent Medicine Princess Margaret Hospital
Dr. Kwing-wan Tsui	Senior Medical Officer Department of Paediatrics and Adolescent Medicine Alice Ho Miu Ling Nethersole Hospital
Dr. Theresa Wong	Specialist in Paediatrics
Dr. Eric Yau	Associate Consultant Department of Paediatrics and Adolescent Medicine Princess Margaret Hospital
Dr. Sam Yeung	Specialist in Paediatrics

• Detailed Scientific Programme

Date: 18 Nov 2011 (Friday)
Venue: Lecture Theatre, G/F., Block M, Queen Elizabeth Hospital
Chairpersons: Dr. Chok-wan Chan and Dr. Catherine Lam

1830 – 2000 Registration and Light Buffet Dinner

2000 – 2200 **Seminar I**
Imaging of normal and abnormal brain development
Prof. Paul Griffiths, UK

Date: 19 Nov 2011 (Saturday)
Venue: Lecture Theatre, G/F., Block M, Queen Elizabeth Hospital
Chairperson: Dr. Stephenie Liu and Dr. Kwing-wan Tsui

1330 – 1400 Registration

1400 – 1500 **Seminar II**
Pre and post natal development of the cerebral hemisphere
Prof. Paul Griffiths, UK

1500 – 1530 Coffee Break

1530 – 1730 **Local Presentation I**
Navigation in neurosurgery
Dr. John Kwok, Hong Kong

Imaging of paediatric stroke
Dr. Wendy Lam, Hong Kong

The application of brain imaging in epilepsy – a child neurologist perspective
Dr. Wai-kwong Chak, Hong Kong

Date: 20 Nov 2011 (Sunday)
Venue: Lecture Theatre, G/F., Block M, Queen Elizabeth Hospital
Chairpersons: Dr. Wai-kwong Chak and Dr. Sam Yeung (Morning Sessions)
Dr. Tim Liu and Dr. Eric Yau (Afternoon Sessions)

0900 – 0930 Registration

0930 – 1030 **Seminar III**
The role of fetal MR in detecting brain abnormalities
Prof. Paul Griffiths, UK

1030 – 1130 **Free Paper Presentations**
The effect of Taekwondo training on balance and sensory organization in children with developmental coordination disorder: a randomized controlled trial
Ms. Shirley Fong, Hong Kong

New Chinese reading acuity charts for Hong Kong Chinese children
Ms. Josephine Cheung, Hong Kong

A randomized controlled trial to compare the effects of directive and non-directive parenting programmes
Mr. Stanley Chan, Hong Kong

Speech recognition ability of children with High Frequency Sensori-neural Hearing Loss (HFSHL) using the Cantonese Hearing in Noise Test (CHINT)
Ms. Sandra Wong, Hong Kong

	Effectiveness of structured home-based somatosensory training programme for improving attention on preschool children with Autistic Spectrum Disorder (ASD) Ms. Carmen Cheng, Hong Kong
1130 – 1200	Coffee Break
1200 – 1300	Seminar IV Imaging of the phakomatoses Prof. Paul Griffiths, UK
1300 – 1400	Light Buffet Lunch
1400 – 1445	Local Presentation II Neuro-surgical case discussion Dr. Dawson Fong, Hong Kong
1445 – 1530	Case Presentations A 10 years old girl with right cerebral atrophy and leptomenigeal angioliomatosis Dr. Kam-hung Ma, Hong Kong Case sharing Dr. Grace Ng, Hong Kong
1530 – 1600	Coffee Break
1600 – 1700	Seminar V Advances in neonatal brain MR Prof. Paul Griffiths, UK

Date: 21 Nov 2011 (Monday)
Venue: Jade Ballroom, 2/F., Eaton Smart, Hong Kong
Chairpersons: Dr. Chok-wan Chan and Dr. Theresa Wong

1830 – 1900	Registration
1900 – 2000	Keynote Lecture An approach to imaging children with cerebral palsy Prof. Paul Griffiths, UK
2000 – 2200	Chinese Banquet

● Academic Accreditations

College/Association	18 Nov	19 Nov	20 Nov	21 Nov
Hong Kong College of Paediatricians (cat A, pending)	2	2	6	2
Hong Kong College of Family Physicians (cat 5.2)	2	3	5	1
Hong Kong College of Pathologists (passive)	1	1.5	3	1
Hong Kong College of Physicians (passive)	1	2	2.5	0.5
Hong Kong College of Radiologists	2	3	5.5	1
MCHK CME Programme (passive)	2	3	5	1
Hong Kong Occupational Therapists Association	TBA	TBA	TBA	TBA
Hong Kong Physiotherapy Association	2	4	5	1

• Seminar I

Imaging of normal and abnormal brain development

Paul Griffiths

Professor, Department of Radiology, The University of Sheffield, UK

In this seminar I will introduce an approach to interpreting paediatric brain malformations on MR imaging based on knowledge of normal brain of development. I will describe the signature abnormalities for each epoch on the basis of the developmental defect and provide examples from fetal and paediatric imaging.

Suggested reading

The 'Congenital malformations of the brain and skull' chapter in Barkovich's Pediatric Neuroimaging book.

• Seminar II

Pre and post natal development of the cerebral hemisphere

Paul Griffiths

Professor, Department of Radiology, The University of Sheffield, UK

I will now go into much more detail about the development of the cerebral hemispheres in the second and third trimesters of pregnancy and show more detailed examples of abnormal cortical formation. Subsequently I will go on to describe the major post-natal brain changes that are visible on MR imaging, primarily evolving myelination.

Suggested reading

The 'Congenital malformations of the brain and skull' and 'Normal development of the neonatal and infant brain, skull and spine' chapters in Barkovich's Pediatric Neuroimaging book.

Local Presentation I

Navigation in neurosurgery

John Kwok

Chief of Service, Department of Neurosurgery, Kwong Wah Hospital, Hong Kong

Progress in image-guided neurosurgery, and specifically in computer-assisted frameless navigation techniques and the application of robotic systems, has brought about many changes in the way we approach and treat pathologies involving the adult and paediatric central nervous system. Nevertheless, children are a patient group with special demands, in whom image-guided surgical techniques have certain limitations. In this presentation, special focus shall be presented in the common problem of registration accuracy in image-guided neurosurgery and assess both the reliability and the potential of ultrasound-based neuronavigation and robot-assisted neuroendoscopy in paediatric patients.

Methods and Results: The presentation shall explore the referencing and tracking techniques adapted to the needs of the paediatric patient. In addition, advantages and limitations of a 3D real-time ultrasonography-based navigation system are illustrated.

The application of 3D printing and fabrication of skull model for cranioplasty and craniofacial reconstruction shall be presented. Finally, experience with MKM robot-assisted neuromicroscope shall be presented and discuss the possible implications of the technique for the future.

Conclusion: Image-guided techniques in paediatric neurosurgery are valuable tools and may open up new perspectives in the future. With the prospect of developing the Centre of Excellence in paediatric and Neurosurgery in Hong Kong, we shall expect a quantum leap in adult as well as paediatrics neurosurgical care.

Local Presentation I

Imaging of paediatric stroke

Wendy Lam

Consultant, Department of Radiology, Queen Mary Hospital, Hong Kong

Paediatric Stroke is a non-specific term. It means the sudden development of a neurological deficit, including everything from hypoxic-ischaemic injury in premature infant to hemorrhagic infarction from arterial or venous causes in infants and children. It's etiology can be identified in about 75% of cases and can be divided into 2 categories: ischaemic stroke and parenchymal haemorrhage. Cardiac disorders and hemoglobinopathy are the most common causes of ischaemic infarcts. Congenital anomalies of blood vessels or defects in coagulation or platelet function are common causes of parenchymal hemorrhage.

The role of imaging is to establish and confirm diagnosis of stroke, to identify the underlying disease for timely therapy; to exclude other conditions that mimic stroke, such as tumour or subdural haematoma; and to help in the long term management and prevention. Non-contrast CT scan is usually the initial diagnostic study. It aims to differentiate ischaemia from parenchymal haemorrhage, and identify underlying lesions such as tumour, vascular malformation and subdural/epidural haematoma. MRI is more sensitive than CT to subtle increases in bulk water. It can detect acute infarction within 6-24 hours and can define the extent of infarction better than CT. However, standard MRI failed to detect 10-20% acute stroke. Other imaging techniques can be used. They include MR/CT angiography, Diffusion-Weighted Imaging (DWI), MR/CT Perfusion-Weighted Imaging (PWI), MR spectroscopy, and last but not least, conventional cerebral angiography.

The indications, pros and cons of different kinds of imaging modalities will be discussed. Some mimics of paediatric stroke will also be discussed.

• Local Presentation I

The application of brain imaging in epilepsy – a child neurologist perspective

Wai-kwong Chak

Associate Consultant, Department of Paediatrics and Adolescent Medicine, Tuen Mun Hospital, Hong Kong

There is no doubt lot of new advance in brain imaging in epilepsy in recent year. Because of these, we now have much better understanding of the underlying etiologies of epilepsy. Moreover, we are now able to localize the epileptogenic focus/lesion and hence resective surgery become possible nowadays. Different modalities of brain imaging include: MRI, PET, SPECT, DTI, MEG and it's application in epilepsy care will be discussed. Case illustration and experience sharing by NTWC epilepsy team to show how brain imaging incorporating with other investigations includes: video EEG, neuropsychology etc helping in individual epilepsy care.

• Seminar III

The role of fetal MR in detecting brain abnormalities

Paul Griffiths

Professor, Department of Radiology, The University of Sheffield, UK

Based on the knowledge from seminars I and II, I will show what impact in utero MR has had in the detection of fetal brain abnormalities during pregnancy. I will also describe some of the techniques used to image the fetus in this situation.

Suggested reading

1. Griffiths PD et al. The emergence of in utero MR imaging for fetal brain and spine abnormalities. *British Medical Journal* 2005 331(7516):562-565.
2. Griffiths PD et al. A prospective study of fetuses with isolated ventriculomegaly investigated by ante-natal ultrasound and in utero MR. *American Journal of Neuroradiology* 2010 31:106-111.

Free Paper Presentations

The effect of Taekwondo training on balance and sensory organization in children with developmental coordination disorder: a randomized controlled trial

Shirley Fong, William Tsang

Department of Rehabilitation Sciences, The Hong Kong Polytechnic University

Background & Objectives: Children with developmental coordination disorder (DCD) have poorer postural control. This study aimed to evaluate the effects of three months of taekwondo (TKD) training on the sensory organization and standing balance of children with DCD.

Methods: Forty-four children with DCD (mean age: 7.6 ± 1.3 years) and 18 typically developing children (mean age: 7.2 ± 1.0 years) were recruited. Twenty-one children with DCD were randomly selected to undergo daily TKD training for three months. Twenty-three children with DCD and 18 typically developing children received no training as controls. Sensory organization and standing balance were evaluated using a sensory organization test (SOT) and unilateral stance test (UST), respectively.

Results: Improvements in the vestibular ratio ($p=0.003$) and UST sway velocity ($p=0.007$) were significantly greater in the DCD-TKD group than in the DCD-control group. There was no significant difference in the average vestibular ratio or UST sway velocity between the DCD-TKD and normal-control group after TKD training. No change was found in the somatosensory ratio after TKD training. Significant improvements in visual ratios, vestibular ratios, SOT composite scores and UST sway velocities were also observed in the DCD-TKD group after training ($p \leq 0.01$).

Conclusion: Three months of daily TKD training can improve sensory organization and standing balance for children with DCD. Clinicians can suggest TKD as a therapeutic leisure activity for this population.

Reference

This study has been published in Fong, S.S.M., Tsang, W.W.N., & Ng, G.Y.F. (2012). Taekwondo training improves sensory organization and balance control in children with developmental coordination disorder: A randomized controlled trial. *Research in Developmental Disabilities*, 33, 85-95.

● Free Paper Presentations

New Chinese reading acuity charts for Hong Kong Chinese children

Josephine Cheung¹, Dilys Liu², Allen Cheong²

¹Child Assessment Service, Department of Health; ²School of Optometry, The Hong Kong Polytechnic University

The aims of the study is to develop a set of Chinese Reading Acuity Charts for Hong Kong Chinese Children. 169 students aged from 7 to 9 years (P.2-P.5 local primary students) with normal vision were recruited. Reading performance were measured by Traditional-Chinese version of MNREAD Acuity Chart and short Chinese passages (derived from K1-P1 Children's story books). This acuity chart comprises single sentences at a range of print sizes (1.3 logMAR to -0.3 logMAR) in 0.1 log steps. Each sentence consists of 18 Chinese words printed over three lines and the legibility for individual sentence was classified as P.2 or below. Three acuity charts were produced for measuring participant's reading speed as a function of print size. Each participant was asked to read aloud one sentence at a time, as quickly and accurately as possible. Reading time and number of errors made for each sentence were recorded and converted to reading speed in number of corrected words read per minute. Reading data were analyzed by nonlinear mixed-effects models to estimate maximum reading speed, critical print size and reading acuity. Other than sentence reading, passage reading performance was measured by asking the participants to read the six short Chinese passages. Reading performance measured by sentences and passages were compared using correlation analysis. Repeatability of reading data were also analyzed. This Chinese reading acuity charts can be applied for assessing the reading performance of children and informed the management for dyslexic and low vision children, as well as the fonts size enlargement recommendation.

A randomized controlled trial to compare the effects of directive and non-directive parenting programmes

Stanley Chan, Cynthia Leung

Department of Applied Social Science, The Hong Kong Polytechnic University

Robust evidence on the effectiveness of directive parenting programmes in reducing child behavioral problems and parental stress can be abundantly found in psychological literature. However, critiques against these directive parenting programmes emerged regarding their adherence to values of western cultural values and their implicit indication of the inadequacy onto the participating parents. The present study focused on comparing the effectiveness of directive (adopting Triple P - Positive Parenting Program) and non-directive parenting programmes with a sample of 92 Hong Kong Chinese parents of preschoolers recruited from eight kindergartens and a local church. They were randomized into Triple P group, non-directive group, and control group and completed measures on their perception of child behavioral problems and their parenting stress before and after intervention. No significant difference was found in the pre-intervention measures between the three groups. At post-intervention phase, results indicated significantly greater decrease in child disruptive behaviors among participants in the Triple P group than those in the non-directive group and control group while no significant group difference was found between the latter two groups. Also, no significant difference was found in post-intervention parental stress level among the three groups. Implications regarding these findings were discussed.

Free Paper Presentations

Speech recognition ability of children with High Frequency Sensori-neural Hearing Loss (HFSHL) using the Cantonese Hearing in Noise Test (CHINT)

Sandra Wong

Child Assessment Service, Department of Health

High Frequency Sensori-neural Hearing Loss (HFSHL) is classified as non-significant hearing impairment. However, numerous studies have indicated that listeners with mild grade sensori-neural loss experience difficulty in understanding speech, especially in noisy situations. To better understand the difficulty, children with HFSHL, experience in comprehending speech, this study examined speech reception thresholds (SRTs) of children with HFSHL in quiet and noisy situations using the Cantonese Hearing in Noise Test (CHINT). Moreover, the effect of varied degrees of HFSHL on changes in SRTs was examined. 30 children with HFSHL and 48 adults with normal hearing (NH) participated in this study. Correlation analysis indicated SRTs and hearing threshold levels were highly correlated ($p < 0.01$) in both quiet and noise conditions. The trend of response changes in SRT associated with increased severity of HFSHL was clearly demonstrated by the multiple means comparisons. SRT was significantly poorer in most HFSHL groups than in the NH group i.e. $p < 0.001$. Overall, children with HFSHL performed better in the speech recognition task in quiet situations. Children with more severe HFSHL experienced greater difficulty in speech recognition performance than individuals without or with less HFSHL. Children with HFSHL performed poorer than normal hearing individuals in CHINT.

Effectiveness of structured home-based somatosensory training programme for improving attention on preschool children with Autistic Spectrum Disorder (ASD)

Carmen Cheng¹, Karen Liu², Jenny Choi³

¹SAHK; ²The Hong Kong Polytechnic University; ³The Haven of Hope Christian Services

This study aimed to investigate the effectiveness of structured home-based somatosensory programme on attention of children with Autistic Spectrum Disorder (ASD) demonstrating sensory modulation problem(s). Rinaldi, Perrodin & Markram (2008) found neuronal microcircuit alterations (hyperconnectivity and hyperplasticity) in both somatosensory and prefrontal cortices of animal model simulated with ASD condition. The inhibitory mechanism was suggested to be malfunction. Studies suggested sensory inputs were able to activate the inhibitory circuits underlying intracortical inhibition (Aracri et al., 2010; Trompetto, Buccolieri & Abbruzzese, 2001). 17 children with ASD aged 3-6 years old were recruited and assessed every 7 days on visual and auditory attention until a stable baseline was established. 4-week daily home-based somatosensory training programme, consisted of tactile and proprioception-rich activities were introduced in the treatment phase. Significant differences were found in pre- and post-treatment difference of visual attention ($p < 0.001$), auditory attention ($p = 0.001$; $p = 0.002$) and Cognition and Inattention index T score ($p = 0.001$). Significant correlations were found among sensory sensitivity, sensory seeking and low registration of Sensory Profile with the Cognitive Problem/Inattention index of CRS-R using Spearman's R correlation ($r = -0.60$, $p = 0.011$; $r = -0.69$, $p = 0.002$; $r = -0.54$, $p = 0.026$) suggesting that a relationship existed between sensory modulation and attention. The present study suggests 4-week intensive somatosensory programme can improve attention of children with ASD.

● Seminar IV

Imaging of the phakomatoses

Paul Griffiths

Professor, Department of Radiology, The University of Sheffield, UK

Children with phakomatoses often require neuroimaging. In this seminar, I will concentrate on the MR appearances of the three commonest phakomatoses, Sturge-Weber syndrome, Tuberous Sclerosis complex and Neurofibromatosis type 1 but will also show cases from the rarer phakomatoses.

Suggested reading

1. Mukunoveshuro W, Blaser S, Griffiths PD. Neurofibromatosis Type 1: The role of neuroradiology. *Neuropediatrics* 30(1999):111-119.
2. Griffiths PD and Martland TR. Tuberous Sclerosis Complex: The role of neuroradiology. *Neuropediatrics* 28(1997):1-9.
3. Griffiths PD. Sturge-Weber revisited: The role of Neuroradiology. *Neuropediatrics* 27(1996):1-11.

• Local Presentation II

Neuro-surgical case discussion

Dawson Fong

Chief of Service, Department of Neurosurgery, Tuen Mun Hospital, Hong Kong

In this day and age, the practice of neurosurgery depends very much on the sophistication of various modalities of neuroimaging. Not only would it help in making a diagnosis and facilitate our decision to suggest surgery, it would also help us to design our approach and navigate through the all too important structures of the central nervous system lest we inflict undue morbidities.

In this session, interesting cases will be brought up for sharing to demonstrate how neurosurgeons and radiologists are inseparable partners in delivering quality neurosurgical care of the modern era.

20 November 2011

• Seminar V

Advances in neonatal brain MR

Paul Griffiths

Professor, Department of Radiology, The University of Sheffield, UK

The current routine method for assessing the neonatal brain in many countries is ultrasonography, based on costs and the ability to perform such examinations at the cot side. In this presentation I will consider the potential advantages of neonatal MR over ultrasonography in this clinical situation and discuss potential strategies that will allow better access to MR in the neonatal period.

• Keynote Lecture

An approach to imaging children with cerebral palsy

Paul Griffiths

Professor, Department of Radiology, The University of Sheffield, UK

In this lecture, I will consider the aetiology and epidemiology of cerebral palsy along the lines of correcting a common misunderstanding that it is always due to hypoxia ischaemic injury at birth. After considering the MR imaging appearances of other causes of cerebral palsy, I will return to the topic of brain injury caused by hypoxic ischaemic injury and explain some current concepts in anatomico-clinical correlations.

Suggested reading

1. Griffiths PD et al. Anatomical Localization of Dyskinesia in Children with 'Profound' Perinatal Hypoxic Ischemic Injury. *American Journal of Neuroradiology* 2010 31:436-431.
2. Connolly DJA, Widjaja E, Griffiths PD. Involvement of the anterior lobe of the cerebellar vermis in perinatal profound hypoxia. *American Journal of Neuroradiology* 2007 28(1):16-19.

• Notes

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• Record of Past Annual Scientific Meetings

Since the inauguration of our Society in 1994, Annual Scientific Meetings were held each year:

2010

Date: 26 – 29 November 2010
Theme: Neuro-Immunology
Keynote Lecture: Auto-antibodies in Paediatric Neurology
Course Director: Professor Russell Dale, Australia

2009

Date: 13 – 16 November 2009
Theme: Autism Spectrum Disorders: Updates on Management
Keynote Lecture: Complementary and Alternative Medicine in Autism Spectrum Disorders: Public Forum
Course Director: Professor Lonnie Zwaigenbaum, Canada

2008

Date: 21 – 24 November 2008
Theme: Neuro-Genetics
Keynote Lecture: Exploring the Neurogenetics of Mental Retardation
Course Director: Professor Alan Percy, USA

2007

Date: 16 – 19 November 2007
Theme: Energy Crisis of Nervous System
Keynote Lecture: Approach to the Diagnosis and Management of Muscle Cramps, Exercise Intolerance and Recurrent Childhood Myoglobinuria
Course Director: Dr. Ingrid Tein, Canada

2006

Date: 10 – 13 November 2006
Theme: Attention Deficit Hyperactivity Disorder
Keynote Lecture: Treatment of ADHD: Medical Behavioural and Educational and Prognosis
Course Director: Professor Drake Duane, USA

2005

Date: 11 – 14 November 2005
Theme: Neuromuscular Disorders of Infancy, Childhood and Adolescence
Keynote Lecture: Childhood Neuromuscular Disorder from the Perspective of Adult Neurology
Course Director: Professor Royden Jones, USA

2004

Date: 19 – 22 November 2004
Theme: Paediatric Rehabilitation
Keynote Lecture: Evolution of Developmental Paediatrics in Hong Kong
Course Director: Dr. Chok-wan Chan

Keynote Lecture: Developmental Paediatrics in the 21st Century
Course Director: Professor Robert Armstrong, Canada

2003

Date: 19 – 22 September 2003
Theme: Paediatric Neurocritical Care
Keynote Lecture: Head Injury and Neuroscience – Inside Fragile Minds
Course Director: Dr. Robert Tasker, UK

2002

Date: 8 – 11 March 2002
Theme: Paediatric Neuro-Ophthalmology
Keynote Lecture: The Apparently Blind Child
Course Director: Professor David Taylor, UK

2000

Date: 8 – 11 December 2000
Theme: Language Development, Learning Disorders and Brain Plasticity: Research and Clinical Implications
Keynote Lecture: Language Development, Learning Disorders and Brain Plasticity: Research and Clinical Implications
Course Director: Professor Albert Galaburda, USA

1999

Date: 20 – 22 November 1999
Theme: Paediatric Neuro-Epidemiology
Keynote Lecture: What Happens to Children who Suffer with Febrile Convulsions
Course Director: Dr. C. M. Verity, UK

1998

Date: 14 – 16 July 1998
Theme: Paediatric Epilepsy
Keynote Lecture: Epilepsy: A Potential Reversible Cause of Developmental Disability
Course Director: Professor Brian Neville, UK

1997

Date: 11 – 13 November 1997
Theme: Neonatal Neurology
Keynote Lecture: Brain Injury in Premature Newborn – An Overview
Course Director: Professor Alan Hill, Canada

1996

Date: 29 October – 1 November 1996
Theme: Paediatric Neurorehabilitation
Keynote Lecture: Recent Advances in Paediatric Neurorehabilitation
Course Director: Professor Joe Watt, Canada

1995

Date: 14 – 16 November 1995
Theme: Neurometabolic Diseases
Keynote Lecture: Update on Neurometabolic Diseases in Childhood
Course Director: Professor Kenneth Swaiman, USA



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