

AOSPR

2023

21st Annual Scientific Meeting of
Asian and Oceanic Society for
Paediatric Radiology

2nd-3rd SEPTEMBER

**HONG
KONG**



@ Hong Kong Academy of Medicine
Jockey Club Building

PROGRAMME BOOK



Organised by



Supported by



香港兒童醫院慈善基金
Hong Kong Children's Hospital
Charitable Foundation



AOSPR 2023 Secretariat
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www.aospr2023.org

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World 1st Superconducting Neonatal MRI System

Light, Compact, Fast, Safe, Quiet
Cryo-free and designed for NICU

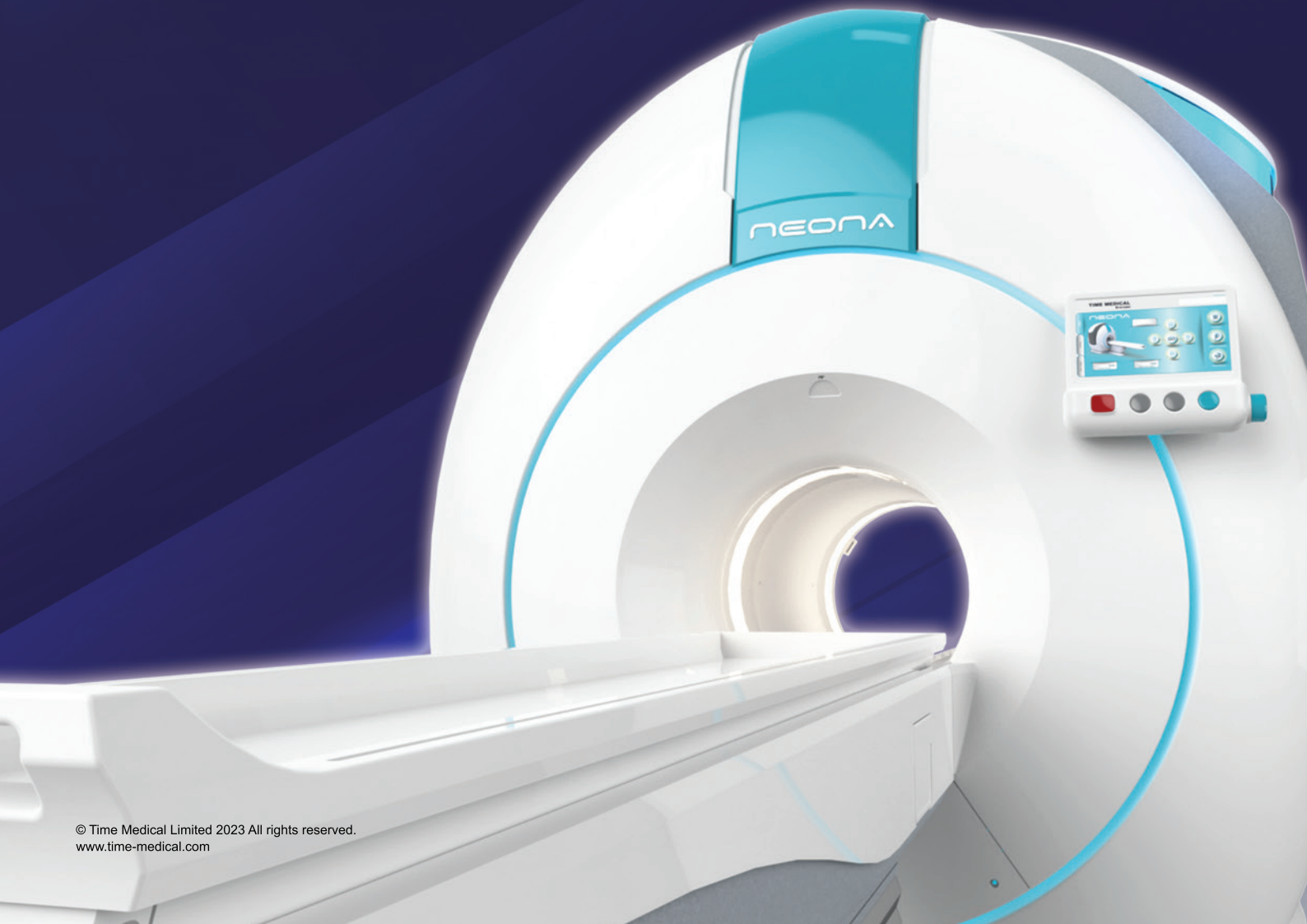
SEP
Monday
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Visit Neonatal facility
Transportation service



Nina Hotel Island South 09:30am /
Hong Kong Ocean Park Marriott Hotel 09:45am
The tour takes approx. 2 hours
Reservation is required

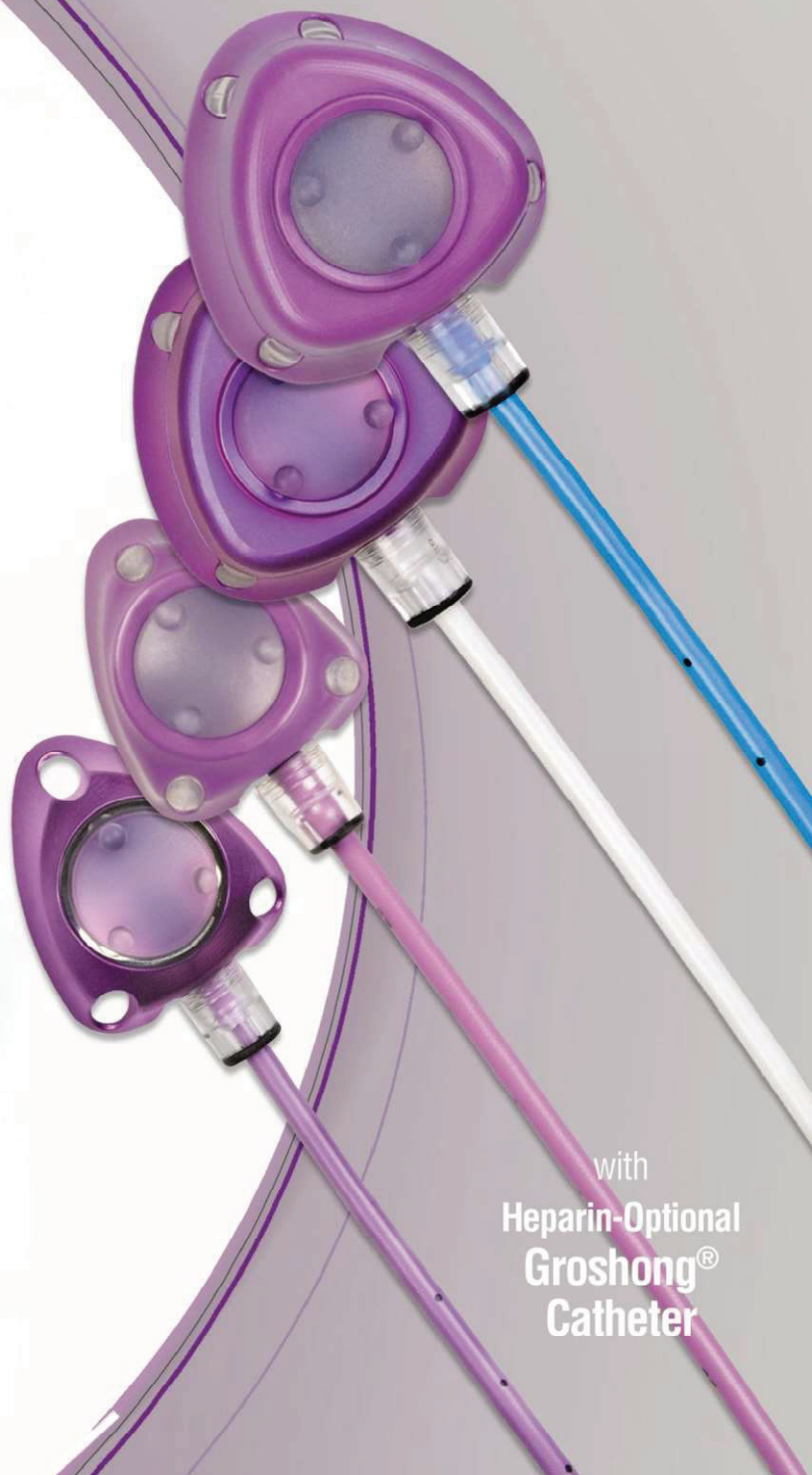


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Welcome Message

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On behalf of the Asian and Oceanic Society for Paediatric Radiology (AOSPR) and Hong Kong College of Radiologists, it gives us great pleasure to invite you all to participate in the 21st Annual Scientific Meeting of AOSPR, which will be held from Saturday to Sunday, 2–3 September 2023 at the Hong Kong Academy of Medicine.

The last AOSPR Annual Scientific Meeting Hong Kong was held exactly 10 years ago in 2013, we are honoured to have the opportunity again to be the host of this exciting congress. AOSPR 2023 Hong Kong will share an insight into the latest development and cutting-edge technologies in paediatric imaging. The 2-day scientific programme will embrace diverse topics ranging from neuroimaging to musculoskeletal radiology, from interventional radiology to quality and safety. There are 4 multi-disciplinary sessions on oncological imaging, imaging in renal disease, neuro radiology and state-of-the art imaging.

Apart from the invited lectures delivered by the outstanding speakers from around the world, there will be proffered papers, hands-on workshops, film quiz and awards. Upholding the AOSPR tradition, there is an exciting social programme that will suit everyone whether you are a culinary expert, a savvy shopper or an outdoor lover.

We are confident that the occasion will bring together radiologists, radiographers, health care professionals and researchers to exchange ideas and professional knowledge, and showcase research findings in paediatric imaging. The local organising committee is committed to making AOSPR 2023 Hong Kong a memorable and successful one.

We look forward to meeting you in AOSPR 2023 at Hong Kong!



Prof. Winnie CHU
President,
Asian and Oceanic Society for
Paediatric Radiology (2023 -2024)
Congress Co-Chair, AOSPR 2023



Dr Chun-Key LAW
President,
Hong Kong College
of Radiologists



Dr Elaine KAN
Congress Co-Chair,
AOSPR 2023



About AOSPR

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The Asian and Oceanic Society for Paediatric Radiology (AOSPR) is a society of Paediatric Radiologists in the Asian and Oceanic region stretching from Turkey and Jordan in the West to Korea, Japan, Australia, New Zealand and the Philippines in the East and covering all points in between.. The AOSPR is dedicated to the promotion of Paediatric Radiology in the Asia-Oceanic region through cooperative research, teaching and education.

The Society aims to establish close ties with the many regional national societies. Furthermore the AOSPR has close ties with International Paediatric Radiology societies such as the Society for Paediatric Radiology (SPR), European Society of Paediatric Radiology (ESPR), and the Sociedad Latino Americana de Radiologia Pediatrica (SLARP). By close cooperation with these societies and dedication towards education and research, the AOSPR strives to achieve its aim of improving healthcare standards in the imaging of children.



About HKCH

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Hong Kong Children's Hospital is a tertiary referral center for complex, serious and rare pediatric cases requiring multi-disciplinary specialist care. Since service commencement in late 2018, it has concentrated expertise in pediatrics and served as the hub in the hub-and-spoke model of pediatric service together with other pediatric departments. HKCH provides children-centered and family-friendly services to create a better patient experience. The Department of Radiology at HKCH strives to providing the highest quality of clinical care in the safest possible environment, at the same time promoting research and strengthening teaching and training.



Photo Credit: Dr. Wendy Lam



Committee

Organizing Committee

Congress Co-chairpersons	Prof. Winnie Chu Dr. Elaine Kan
Honorary Secretary	Dr. Joyce Chan
Honorary Treasurer	Dr. Wendy Lam
Members	Dr. Eric Cheung Dr. Leanne Chin Dr. Kevin Fung Dr. Kenneth Kwok Dr. Charlotte Kwong Dr. Billy Lai Mr. TP Lam Dr. HY Lau Dr. Philip Lee Dr. Cat Mak Dr. Carol Ng Mr. TM Ng Dr. Sunny Tse Dr. Chris Wong

Scientific Subcommittee

Chairperson	Dr. Kevin Fung
Members	Dr. Joyce Chan Dr. Eric WP Cheung Dr. Leanne Chin Dr. Milly Chiu Prof. Winnie Chu Dr. Billy Lai Dr. Chris Wong

Program & Publication Subcommittee

Co-Chairpersons	Dr. Philip Lee Dr. Carol Ng
Members	Dr. Jonathan Chen Dr. Claudia Cheung Dr. Leanne Chin Dr. Yo Yo Chiu Dr. Elaine Kan



Helpers

The Organizing Committee of AOSPR 2023 gratefully acknowledges the following helpers for their contribution to the Congress.

Dr. Cherry CHAN

Kwong Wah Hospital

Dr. Derek CHAN

Queen Mary Hospital

Dr. Hayden CHAN

Prince of Wales Hospital

Dr. Man-Man CHAN

North District Hospital

Dr. Priscilla CHAN

Pok Oi Hospital & Tuen Mun Hospital

Dr. Serena CHAN

Pok Oi Hospital & Tuen Mun Hospital

Ms. Ka-Yee CHE

Hong Kong Children's Hospital

Dr. Chun-Lam CHEUNG

Queen Elizabeth Hospital

Dr. Justin CHOI

United Christian Hospital

Dr. Tsz-Ho CHOW

Prince of Wales Hospital

Dr. Calvin HO

Tseung Kwan O Hospital

Dr. Natalie Iris HO

Prince of Wales Hospital

Dr. Wang-Hei HUI

Prince of Wales Hospital

Dr. Allen KUNG

Queen Elizabeth Hospital

Dr. Fran KWOK

Pamela Youde Nethersole Eastern Hospital

Dr. Quinn LAM

Tseung Kwan O Hospital

Dr. Jennie LAU

Prince of Wales Hospital

Dr. Wing-Chung LAW

Prince of Wales Hospital

Dr. Yee-Ting LEE

Prince of Wales Hospital

Dr. Hong-Yip LO

Kwong Wah Hospital

Dr. Natalie MOK

Queen Mary Hospital

Dr. Pascale SHEN

Prince of Wales Hospital

Dr. Kin-Shing TAM

North District Hospital

Dr. Alexander TANG

United Christian Hospital

Dr. Peggy TANG

Queen Elizabeth Hospital

Dr. Pui-Yi WONG

Princess Margaret Hospital

Dr. Faye YU

Prince of Wales Hospital

Dr. King-Shing YUNG

Princess Margaret Hospital



International Faculty

Dr. Hamzaini ABDUL HAMID
 Universiti Kebangsaan Malaysia
Malaysia

Dr. Luqman Adji SAPTOJINO
Indonesia

Dr. Frederic BERTINO
 NYU Langone Health
USA

Dr. Dorothy BULAS
 Children's National Hospital
USA

Dr. Timothy CAIN
 The Royal Children's Hospital Melbourne
Australia

Dr. Taylor CHUNG
 UCSF Benioff Children's Hospital Oakland
USA

Dr. Nathan David CONCEPCION
 St. Luke's Medical Center
Philippines

Prof. Michael DITCHFIELD
 Monash Children's Hospital
Australia

Prof. Monica EPELMAN
 University of Central Florida
USA

Prof. Stephanie FRANCHI-ABELLA
 Bicêtre Hospital
France

Dr. Donald FRUSH
 Duke University Medical Center
USA

Prof. Andrés GARCÍA-BAYCE
 University of the Republic
Uruguay

Prof. Maria Pilar GARCIA-PEÑA
 Central University of Barcelona
Spain

Dr. Amy JULIANO
 Harvard Medical School
USA

Dr. Jeevesh KAPUR
 National University Hospital
Singapore

Prof. Joanna KASZNIA-BROWN
 University of Bristol
UK

Prof. Pek-Lan KHONG
 National University of Singapore
Singapore

Prof. Ji Hye KIM
 Sungkyunkwan University
South Korea



International Faculty

Dr. Tatsuo KONO

Tokyo Metropolitan Children's Medical Center
Japan

Dr. Supika KRITSANEPAIBOON

Prince of Songkla University
Thailand

Prof. Bernard LAYA

St. Luke's Medical Center
Philippines

Dr. Edward LEE

Boston Children's Hospital and Harvard Medical
School
USA

Dr. Kish MANKAD

Great Ormond Street Hospital for Children
UK

Dr. Shunsuke NOSAKA

National Center for Child Health and
Development
Japan

Dr. Preeyacha PACHARN

Siriraj Hospital, Mahidol University
Thailand

Prof. Ashley ROBINSON

Sidra Medicine
Qatar

Prof. Derek ROEBUCK

Perth Children's Hospital
Australia

Dr. Susan SHELMEERDINE

Great Ormond Street Hospital for Children
UK

Prof. Stephen SIMONEAUX

Emory University
USA

Prof. Kushaljit SINGH SODHI

Post Graduate Institute of Medical Education and
Research
India

Prof. David STRINGER

the National University of Singapore
Singapore

Dr. Herlina UINARNI

Indonesia

Dr. Abbey WINANT

Boston Children's Hospital and Harvard Medical
School
USA

Dr. Helen WOODLEY

Leeds Children's Hospital
UK



International Faculty

Dr. Maggie ZHONG

Shanghai Children's Medical Center

China

Prof. Ming ZHU

Shanghai Children's Medical Center

China

The list is arranged in surname alphabetical order.



Local Faculty

Dr. Eugene CHAN

Hong Kong Children's Hospital

Prof. Godfrey CHAN

Hong Kong Children's Hospital

Dr. Joyce CHAN

Hong Kong Children's Hospital

Dr. Eric CHEUNG

Kwong Wah Hospital

Ms. Maggie CHIU

Hong Kong Children's Hospital

Ms. Chiko CHONG

Playright Children's Play Association

Prof. Winnie CHU

The Chinese University of Hong Kong

Dr. Kevin FUNG

Hong Kong Children's Hospital

Dr. Billy LAI

Prince of Wales Hospital

Dr. Michael KAM

HKSH Comprehensive Oncology Centre

Dr. Kenneth KWOK

Princess Margaret Hospital

Dr. Elaine KAN

Hong Kong Children's Hospital

Mr. Mike LAI

Hong Kong Children's Hospital

Dr. Wendy LAM

Hong Kong Children's Hospital

Dr. Joseph LEE

Hong Kong College of Radiographer's and
Radiation Therapists

Dr. Adson LEUNG

Queen Elizabeth Hospital

Dr. Vincent LEUNG

The Hong Kong Polytechnic University

Dr. Eric LIU

Prince of Wales Hospital

Ms. Carmen MA

Children's Cancer Foundation

Dr. Cat MAK

Kwong Wah Hospital

Dr. Carol NG

Hong Kong Children's Hospital

Dr. Jimmy SIU

Tuen Mun Hospital

Dr. Sunny TSE

Hong Kong Sanatorium & Hospital



Local Faculty

Mr. Edward WONG

Hong Kong College of Radiographer's and
Radiation Therapists

Dr. Sheila WONG

Hong Kong Children's Hospital

Ms. Yoyo YIU

Hong Kong Children's Hospital



Congress information

Congress Venue

Hong Kong Academy of Medicine Jockey Club Building

Address: 99 Wong Chuk Hang Road, Aberdeen, Hong Kong China

Transportation: www.hkam.org.hk/archive/images/premises/traffic.jpg

Main Track	Pao Yue Kong Auditorium, G/F
Parallel Track	Lim Por Yen Lecture Theatre, G/F
Exhibition and Coffee/tea	Exhibition Hall, G/F
Poster and Rapid Fire Oral Presentation	Foyer, 1/F
Lunch Symposium	Run Run Shaw Hall, 1/F
Breakfast Symposium	James Kung Meeting Room, 2/F
Ultrasound Workshop	Function Room 1&2, 2/F
AGM	Banquet Room 1&2, 3/F

Lunch Symposium

Lunch will be provided during the lunch symposium at the Run Run Shaw Hall on 2-3 September 2023.

Seat is available on first-come-first-served basis.

Congress Banquet

Date & Time: 2 September 2023, 18:00 – 22:00

Venue: Hong Kong Country Club

Address: 188 Wong Chuk Hang Road, Deep Water Bay

Coach Pick Up Time: 17:10 at the entrance of Congress Venue

Dress Code: Smart Casual

*Admission by Ticket.

Official Language

The official language of the Congress is English.

Professional Accreditation

Should Hong Kong delegates wish to obtain CME/CPD points, please signify your attendance at the service desk located next to the entrance of Pao Yue Kong Auditorium.



Congress information

Certificate of Attendance

E-Certificate of attendance and Evaluation will be sent to all attendees after the Congress, on or before 8 September 2023. If you do not receive the email by 8 September 2023, please check your junk mailbox or contact us at info@aospr2023.org.

Liability

The Hosts will not be liable for personal accidents, or any loss or damage of private property during the Congress. Participants should make their own arrangements with respect to personal insurance.

Disclaimer

Whilst every attempt will be made to ensure that all aspects of the Congress mentioned will take place as scheduled, the Hosts reserve the right to make last minute changes should the need arise.

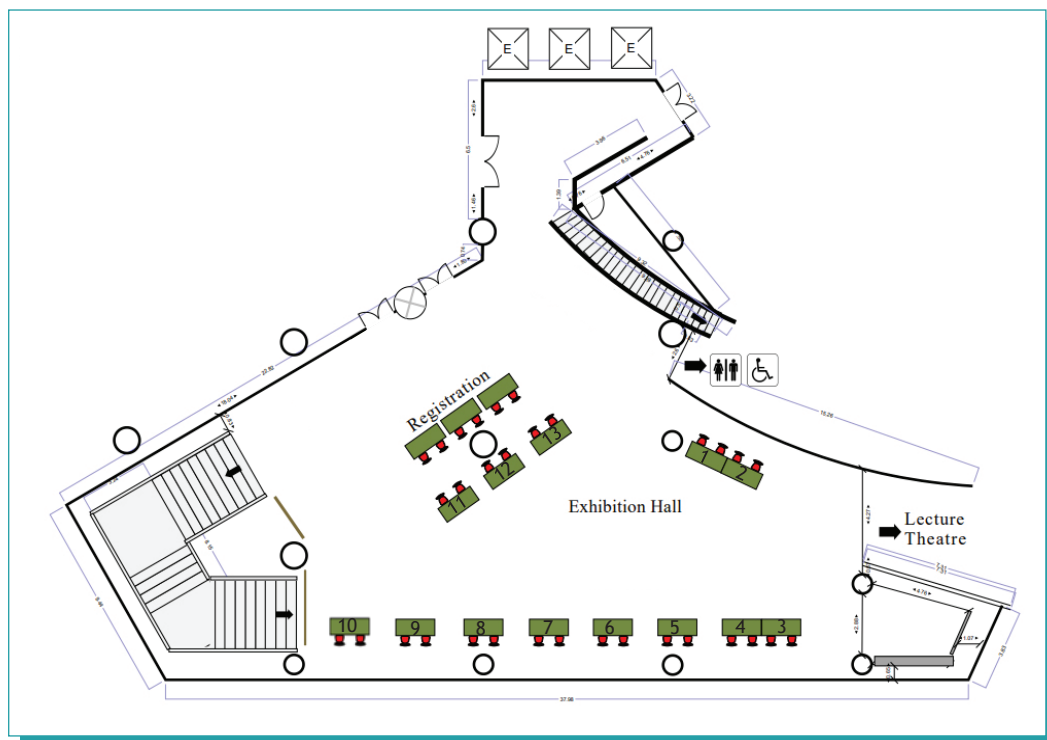
Useful Contacts

Congress hotline (2-3 September 2023)	2852 2333
Emergency Number (police, fire, ambulance)	999
Weather	https://www.hko.gov.hk/tc/index.html
Hong Kong Tourism Board Visitor	2508 1234 https://www.discoverhongkong.com/
Hong Kong Airport Authority Hotline	2181 0000 2181 8888



Floor Plan and Exhibition

Exhibition Hall, G/F



Booth Number	Exhibitors
1+2	Time Medical Limited
3+4	Bayer HealthCare Limited
5	Pacific Medical Systems
6	Medtronic Hong Kong Medical Ltd.
7	Philips Electronics Hong Kong Limited
8	Guerbet Asia Pacific Ltd
9	Telefield Medical Imaging Limited
10	Hong Kong Children's Hospital Charitable Foundation
11	DCH Auriga (Hong Kong) Limited
12	Eisai (HK) Co. Ltd
13	Circle Cardiovascular Imaging Inc.



Academic Accreditations

CME and CPD points have been accredited by the following colleges and programme for local delegates:

(As of 29 August 2023)

College/Association	Max for whole function	2 September 2023 (Day 1)	3 September 2023 (Day 2)	Category and Remarks
CME				
The Hong Kong College of Anaesthesiologists	14.5	6.5	8	PP-NA
Hong Kong College of Community Medicine	10	6	6	PP-PP
The College of Dental Surgeons of Hong Kong	Pending			
Hong Kong College of Emergency Medicine	12	6	6	CME-PP
The Hong Kong College of Family Physicians	10	5	5	OEA-5.02
The College of Ophthalmologists of Hong Kong	Pending			
The Hong Kong College of Orthopaedic Surgeons	2	1	1	PP-B
The Hong Kong College of Otorhinolaryngologists	7.5	3.5	4	PP-2.2
Hong Kong College of Paediatricians	12	6	6	A-PP
The Hong Kong College of Pathologists	12	6	6	CME-PP
Hong Kong College of Physicians	12	6	6	PP-PP
Hong Kong College of Radiologists	14	6.5	7.5	A-PP
The College of Surgeons of Hong Kong	12	6	6	CME-PP
MCHK CME Programme (Accredited by HKAM)	10	5	5	CME-PASSIVECME
CPD				
Hong Kong Radiographers Board	12	-	-	-
The Hong Kong College of Radiographers and Radiation Therapists	10	5	5	-

The final accreditations will be at the discretion of individual college / association.

Participants are required to sign-up the attendance sheet which will be displayed next to the registration counter.




Programme-at-a-glance

2 September 2023 (Sat)				3 September 2023 (Sun)			
PYK Auditorium	LPY Lecture Theatre	Foyer, 1/F		PYK Auditorium	LPY Lecture Theatre	2/F	
0830 - 1700 Registration			Posters presentation, Technical Exhibition, Film Quiz	0710 - 1730 Registration			
						0740 - 0800 Covid Special Focus Session <i>James Kung Meeting Room</i>	
						0800 - 0900 Breakfast Symposium <i>James Kung Meeting Room</i>	
0910 - 1030 Cardiovascular Imaging	0910 - 1030 B1 Preferred papers	0900 - 1030 Rapid Fire Oral Presentation I		0900 - 1020 MSK Imaging	0900 - 1020 Radiographer's Stream I	0900 - 1030 Ultrasound Workshop Session 1 <i>Functions Room 1&2</i>	
1030 - 1045 Coffee Break <i>Exhibition Hall</i>				1020 - 1050 Coffee Break <i>Exhibition Hall</i>			
1045 - 1120 Opening Ceremony				1050 - 1230 Multidisciplinary Symposium 3 - Paediatric Oncology	1050 - 1230 Multidisciplinary Symposium 4 - State of the Art	1100 - 1330 Ultrasound Workshop Session 2 <i>Functions Room 1&2</i>	
1120 - 1300 Multidisciplinary Symposium 1 - Nephro-urological Conditions	1120 - 1300 Multidisciplinary Symposium 2 - Neuro-imaging/ PNAHK Annual Scientific Meeting 2023						
1300 - 1400 Lunch Symposium <i>Run Run Shaw Hall, 1/F</i>				1230 - 1300 Child Life service in Radiology - Let's play! <i>Run Run Shaw Hall, 1/F</i>			
1300 - 1400 AOSPR AGM <i>Banquet Room 1&2, 3/F</i>				1300 - 1400 Lunch Symposium <i>Run Run Shaw Hall, 1/F</i>			
1400 - 1540 Chest Imaging	1400 - 1540 Abdominal Imaging			1400 - 1500 Head & Neck Imaging	1400 - 1500 Radiographer's Stream II	1400 - 1530 Ultrasound Workshop Session 3 <i>Functions Room 1&2</i>	
1540 - 1600 Coffee Break <i>Exhibition Hall</i>			1500 - 1530 Coffee Break <i>Exhibition Hall</i>				
1600 - 1700 Foetal and Post-mortem Imaging	1600 - 1700 B3 Preferred papers	1600 - 1700 Rapid Fire Oral Presentation II	1530 - 1650 Quality and Safety in Paediatric Radiology				
1800 - 2200 Congress Banquet <i>Main Lounge, G/F, Hong Kong Country Club</i>			1650 - 1730 Closing Ceremony				

*Programme is subject to change without prior notice
Prior registration is required and on a first-come-first-served basis.



Scientific Program (Day 1)

	Pao Yue Kong Auditorium		Lim Por Yen Lecture Theatre		Foyer, 1/F
Time	Presentation Topic	Speaker	Presentation Topic	Speaker	
0830-0900	Registration				
0900-1000					Rapid Fire Oral Presentation I
0910-1030	Cardiovascular Imaging		B1 Preferred papers		
	Pediatric venous thromboembolism	Dr. Frederic BERTINO			
	What's new in cardiac imaging	Dr. Taylor CHUNG			
	Value of CMR in diagnosing pediatric coronary artery anomaly	Dr. Maggie ZHONG			
	Introduction to paediatric cardiac CT - for the paediatric and general radiologists	Dr. Carol NG			
1030-1045	Coffee Break				
1045-1120	Opening Ceremony				
1120-1300	Multidisciplinary Symposium 1 -Nephro-urological Conditions		Multidisciplinary Symposium 2 - Neuro-imaging/ PNAHK Annual Scientific Meeting 2023		
	Prenatal and postnatal UTD classification	Dr. Dorothy BULAS	Brain tumours in children- whats our value added	Dr. Kish MANKAD	
	MR urography for congenital urinary tract anomaly in children	Prof. Winnie CHU	The SAS, Dodgy Literature & the Law	Prof. Michael DITCHFIELD	
	Diagnosis and endovascular treatment of pediatric renovascular hypertension	Prof. Derek ROEBUCK	Cerebral Vascular Disorders in Children	Prof. Ji Hye KIM	
	Contrast nephropathy in children - myth or reality?	Dr. Eugene CHAN	Neuroimaging in neurometabolic diseases	Dr. Sheila WONG	
	Q&A		Q&A		
1300-1400	Lunch Symposium Sponsored by  Run Run Shaw Hall, 1/F				
	Dual source photon-counting CT: A game changer in pediatric imaging			Mr. Alberto MAURO Ms. Alexandra ZAHN	
	Shaping the next generation of pediatric MRI			Dr. Aurelien Stalder	
	AOSPR AGM Banquet Room 1 & 2, 3/F				

Posters presentation, Technical Exhibition, Film Quiz

Posters presentation, Technical Exhibition, Film Quiz



Scientific Program (Day 1)

1400-1540	Chest Imaging		Abdominal Imaging		
	Multimodality imaging of the mediastinum and associated abnormalities	Prof. Bernard LAYA	Emergency Abdominal Ultrasound	Dr. Stephen SIMONEUX	
	Imaging of paediatric large airway	Dr. Nathan David CONCEPCION	Diagnostic imaging of neonatal cholestasis	Dr. Shunsuke NOSAKA	
	Thoracic manifestations of systemic diseases	Prof. Maria Pilar GARCIA-PEÑA	Lecture on congenital portosystemic shunt	Prof. Stephanie FRANCHI-ABELLA	
	Chest imaging in immunocompromised children: focused on pediatric transplantation	Dr. Edward LEE	Paediatric MR enterography - update and challenges	Dr. Helen WOODLEY	
	Q&A		Q&A		
1540-1600	Coffee Break				
1600-1700	Foetal and Post-mortem Imaging		B3 Preferred papers		Rapid Fire Oral Presentation II
	Fetal TORCHZ infections : similar patterns, different outcomes	Prof. Andrés GARCÍA-BAYCE			
	Postmortem imaging for beginners: a whistlestop tour	Dr. Susan SHELMERDINE			
	Foetal Medicine, Pathology, Radiology & Genetics/ Genomics (FMPRG) – Our local experience	Dr. Elaine KAN			
1700-1800	Rest				
1800-2200	Congress Banquet Main Lounge, G/F, Hong Kong Country Club				

Posters presentation, Technical Exhibition, Film Quiz

Posters presentation, Technical Exhibition, Film Quiz



Scientific Program (Day 1)

B1 Preferred papers*


Time	Topic	Presenting Author
0910-0916	(40) Development of a deep learning model to identify pediatric orbit fractures in radio-graphs	Dr. Saelin OH
0916-0922	(59) Detection of myocardial fat infiltration in Duchenne muscular dystrophy boys: as-sessed by threshold segmentation method based on cardiac magnetic resonance native T1 mapping	Dr. Xu HUAYAN
0922-0928	(67) Left atrial function in the postoperative right-sided malformations of congenital heart diseases assessed by CMR	Ms. Yanyan MA
0928-0934	(85) Feasibility of portal vein flow quantitation in pediatric patients using 4D MRI	Dr. Jesse COURTIER
0934-0940	(6) MRI assessment of pancreatic steatosis in obese chinese adolescents with non-alcohol-ic fatty liver disease: correlation with beta-cell dysfunction and metabolic syndrome	Dr. Catherine YOUNG
0940-0946	(41) Ultrasound guided hydrostatic reduction of paediatric intussusception: single centre experience at a tertiary care centre	Dr. Prasanna KARPAGA KUMARAVEL
0946-0952	(136) Utility of modified CT severity index in prognostication of acute pancreatitis in children	Dr. Yoyo CHIU
0952-0958	(60) A prospective cohort study of Nusinersen in the treatment of spinal muscular atrophy in children with types 2 and 3 on quantitative muscle MRI	Ms. Yuang HUANG
0958-1004	(63) MRI vessel wall imaging in paediatric intracranial vasculopathies	Dr. Long Hin SIN
1004-1010	(22) Reduced hippocampal subfield volume is associated with ventricular septal defect size in preschool children with tetralogy of Fallot	Dr. Yuting LIU
1010-1016	(48) The utility of Diffuse-Weighted Imaging (DWI) visual assessment and Apparent Diffusion Coefficient value measurement (ADC) in predicting tumor grade of intracranial gliomas: a retrospective study	Dr. Gerard VITERBO
1016-1022	(20) Predicting response to initial chemotherapy in pediatric lymphoma using a semi quantitative CECT-based abdomino-thoracic score: a pilot prospective observational study	Dr. Ishan KUMAR
1022-1028	(42) Prognostic value of POST-Treatment Extent of Tumor (POSTTEXT) system in patients with hepatoblastoma	Prof. Hee Mang YOON

B3 Preferred papers#

Time	Topic	Presenting Author
1600-1606	(101) Feasibility of renal artery flow quantitation in pediatric patients using 4D flow MRI	Dr. Tammy KIM
1606-1612	(91) Multi-site, multi-modal imaging-based prediction of feeding difficulties outcome in neonatal hypoxic-ischemic encephalopathy patients	Ms. Yaqin XIA
1612-1618	(47) Angiographic characteristics and transcatheter arterial embolization therapy in kapo-siform hemangioendothelioma	Prof. Xiaoyun TAN
1618-1624	(49) Foam sclerotherapy for venous malformations in children: a safe and effective treat-ment option	Prof. Xiaoyun TAN
1624-1630	(115) Osteoid osteoma radiofrequency ablation: minimally invasive curative procedure	Prof. Nitin Arun DIKSHIT
1630-1636	(128) A simple and practical elbow bone age evaluation using olecranon apophysis in puberty and development of a deep-learning model	Dr. Gayoung CHOI
1636-1642	(99) Hemophilic arthropathy: spectrum of radiographical changes, correlation with clinical severity, and discussion on pitfalls	Dr. Vandana YADAV
1642-1648	(131) Longitudinal changes in MRI biomarkers of the gluteal muscle groups and functional ability in Duchenne muscular dystrophy: a 12-month cohort study	Ms. Yu SONG
1648-1654	(146) Deep learning reconstruction in the pediatric brain DWI: comparison with conven-tional multi-shot DWI	Dr. Younghun CHOI
1654-1700	(73) Evaluation of glymphatic system activity by diffusion tensor image analysis along the perivascular space index in Rolandic epilepsy	Dr. Lu GAO



Scientific Program (Day 2)

	Pao Yue Kong Auditorium		Lim Por Yen Lecture Theatre		Function Room 1&2, 2/F
Time	Presentation Topic	Speaker	Presentation Topic	Speaker	
0710-0740	Registration				
0740-0800	Covid Special Focus Session James Kung Meeting Room				
	Essentials and updates in pediatric COVID-19 and MIS-C imaging: what radiologists need to know			Dr. Abbey WINANT	
0800-0900	Breakfast Symposium Sponsored by  James Kung Meeting Room				
	Contrast media in paediatric neuroradiology potentialities & cautions			Dr. Kish MANKAD	
0900-1020	MSK Imaging		Radiographer's Stream I		0900 - 1030 Ultrasound Workshop Session 1
	Diagnostic errors in children: if I could read this case again	Dr. Supika KRITSANEIPAIBOON	Fluoroscopic assessment in speech/swallowing for oncology patients	Ms. Yoyo YIU	
	Vascular anomalies in children (with focus on sclerotherapy)	Prof. Ashley ROBINSON	Prepararing paediatrics patients for radiotherapy using virtual reality simulation	Dr. Vincent LEUNG	
	Imaging in paediatric bone tumour	Dr. Hamzaini ABDUL HAMID	The prospects of proton therapy development for pediatric oncology in Hong Kong	Dr. Michael KAM	
	Rare skeletal dysplasias, why do we care?	Dr. Joyce CHAN			
1020-1050	Coffee Break				
1050-1230	Multidisciplinary Symposium 3 -Paediatric Oncology		Multidisciplinary Symposium 4 -State of the Art		1100 - 1230 Ultrasound Workshop Session 2
	Imaging of common abdominal tumors in children	Dr. Preeyacha PACHARN	Renal CEUS in children	Dr. Jeevesh KAPUR	
	Whole body MRI in paediatric oncology	Prof. Joanna KASZNIA-BROWN	US contrast in the management of paediatric extra-cranial tumour	Dr. Wendy LAM	
	Small wound for small patients- role of IR in children with cancer	Dr. Kevin FUNG	Practical MR of the paediatric chest	Prof. Kushalijit Singh SODHI	
	Immunotherapy for childhood solid tumors	Prof. Godfrey CHAN	FAPI PET imaging in cancer	Prof. Pek-Lan KHONG	
	Q&A		Q&A		

Posters presentation, Technical Exhibition, Film Quiz

Posters presentation, Technical Exhibition, Film Quiz



Scientific Program (Day 2)

1230-1300	Child Life service in Radiology - Let's play! <i>Run Run Shaw Hall, 1/F</i>				Posters presentation, Technical Exhibition, Film Quiz
	Hospital play service: enhancing positive patient experience in mri and its potential application			Ms. Chiko Chong	
	Child life service supports paediatric patients in radiology			Ms. Carmen MA	
1300-1400	Lunch Symposium <i>Sponsored by</i> TIME MEDICAL SYSTEMS <i>Run Run Shaw Hall, 1/F</i>				
	Imaging diagnosis of children congenital heart disease in mainland China and update on the pediatric MRI imaging			Prof. Ming ZHU	
1400-1500	Head & Neck Imaging		Radiographer's Stream II		Ultrasound Workshop Session 3
	Pediatric conductive hearing loss – where to look and what to look for	Dr. Amy JULIANO	Contrast-enhanced voiding urosonography	Dr. Kin-Hung LIU	
	Imaging of congenital pharyngeal arch-related anomalies	Dr. Tatsuo KONO	Cardiac CT imaging	Mr. Mike LAI	
	US approach to pediatric thyroid nodule	Dr. Monica EPELMAN	MRI microscopic imaging	Ms. Maggie CHIU	
1500-1530	Coffee Break				
1530-1650	Quality and Safety in Paediatric Radiology				
	Beyond dose: the quality paradigm for pediatric CT	Dr. Donald FRUSH			
	Radiation dose monitoring in children	Dr. Adson LEUNG			
	High rate of wrong diagnosis in children, what can be done	Prof. Stephanie FRANCHI-ABELLA			
	Practical aspects of MR safety	Dr. Timothy CAIN			
1650-1730	Closing Ceremony				



Abstract

Cardiovascular Imaging Pediatric venous thromboembolism



Dr. Frederic BERTINO

*Clinical Assistant Professor of Radiology,
NYU Langone Health,
USA*

Day 1 2 September 2023, Saturday 0910 - 1030

Pediatric venous thromboembolism is a rare, but prevalent disease often underdiagnosed or found in late-stages. This talk will discuss the epidemiology and pathophysiology of venous thromboembolism in pediatric patients and review the clinical, diagnostic and interventional management considerations that radiologists use to determine optimal care decisions. Topics including central venous catheter selection, imaging protocols for upper and lower extremity venous thrombus and interventional techniques for the recanalization and reconstruction of chronically occluded or compressed veins will be discussed. Finally, a brief discussion on care considerations in anticoagulant management and how anatomic considerations diagnosed by the radiologist can influence the medical decisions of hematology and thrombosis doctors and interventional radiologists alike.



Abstract

Cardiovascular Imaging What's new in cardiac imaging



Dr. Taylor CHUNG

*Associate Medical Director and Director of MRI,
 Department of Diagnostic Imaging,
 UCSF Benioff Children's Hospital Oakland,
 USA*

Day 1 2 September 2023, Saturday 0910 - 1030

I like to take this opportunity to highlight the advances of CT and MR by reviewing the literature and showing the audience recent advances by various authors/institutions that I have learnt from. This 20-minute presentation will be divided into two parts. Cardiovascular CT will first be discussed and will include a brief review of principles of PCCT. A review of early clinical experiences using PCCT in pediatric cardiovascular imaging published in the literature and slides from a presentation by Joseph Cao, MD PhD, from Duke University, on this topic at the recent annual scientific meeting of The Society for Pediatric Radiology in May, 2023, in Austin, Texas, USA, will follow. Then, the second part of this presentation will focus of the recent introduction of using Deep Learning (DL) reconstruction in MR and it's application to pediatric cardiovascular imaging. This will include a brief introduction of DL reconstruction follow by clinical examples shown by Shreyas Vasanawala MD PhD, Stanford University, at the recent annual scientific meeting of the Society of Magnetic Resonance in Medicine in June, 2023 in Toronto, Canada. Finally, a word of caution of the clinical adaptation of DL reconstruction will be made.



Abstract

Cardiovascular Imaging

Value of CMR in diagnosing pediatric coronary artery anomaly



Dr. Maggie ZHONG

Chief of diagnostic imaging center,
 Shanghai Children's Medical Center, affiliated with Shanghai Jiao Tong
 University, School of Medicine,
 China

Day 1 2 September 2023, Saturday 0910 - 1030

Coronary artery anomalies in children mainly include congenital and acquired anomalies. Congenital anomalies are mainly manifested as abnormal origin or branch of coronary artery, which are common in congenital heart disease (CHD), especially in complex CHD, such as congenital heart disease related to conotruncal anomalies (tetralogy of Fallot, transposition of the great arteries, double outlet right ventricle, etc.). The incidence of coronary artery anomalies is 5% to 10%. Acquired abnormalities are mainly manifested as coronary aneurysmal dilatation, stenosis and thrombosis, which are basically seen in Kawasaki disease. Abnormal origin or course of coronary artery in congenital heart disease will directly affect surgical plan. For example, abnormal origin of left coronary artery from pulmonary artery requires consideration of how to perform coronary artery migration or external conduit operation in the surgical plan. Tetralogy of Fallot with abnormal course of coronary artery branches requires consideration of surgical path and whether to implant external conduit. The displacement and compression of coronary artery after operation in some congenital heart diseases are important risk factors which affect the prognosis. On the other hand, in Kawasaki disease, coronary artery abnormalities are an area of special concern in the diagnosis and treatment plan and an important risk factor affecting the prognosis. Therefore, the accurate assessment of the origin and branch of coronary artery in congenital heart disease or Kawasaki disease is of great significance for the surgical plan and the postoperative prognosis in children.

At present, echocardiography, cardiac CT, cardiac MR (CMR) and DSA as the "gold standard" for the evaluation of coronary artery are the main imaging methods, each of which has its own advantages and disadvantages. Cardiovascular MR (CMR) has the advantages of non-invasive, non-radiation and multi-parameter quantitative imaging, and plays an increasingly prominent role in the diagnosis and treatment of various cardiovascular diseases. Coronary MRA (CMRA) has advantages in children, pregnant women, and patients who cannot use contrast agents, and can provide a new imaging method for screening coronary heart disease. Due to the high heart rate and small coronary arteries in children with congenital heart disease or Kawasaki disease, and the fact that most of the subjects are too young to cooperate with or without breath-holding examination, the accurate assessment of coronary arteries in children by non-



Abstract

Cardiovascular Imaging

Introduction to paediatric cardiac CT - for the paediatric and general radiologists



Dr. Carol NG

*Associate Consultant,
Department of Radiology,
Hong Kong Children's Hospital,
Hong Kong China*

Day 1 2 September 2023, Saturday 0910 - 1030

A brief overview of segmental cardiac anatomy and the technical basics in planning a congenital cardiac CT.



Abstract

Multidisciplinary Symposium 1 - Nephro-urological Conditions Prenatal and postnatal UTD classification: have we reached consensus?



Dr. Dorothy BULAS

*Chief,
Diagnostic Imaging and Radiology,
Children's National Hospital,
USA*

Day 1 2 September 2023, Saturday 1120 - 1300

This presentation will discuss the issues regarding the current classification systems available that describe prenatal and postnatal urinary tract dilatation. The lack of correlation of ultrasound findings and outcome has been problematic. By developing unified terminology, the hope has been to better standardize the diagnosis and management of various uropathies. The multidisciplinary consensus UTD classification will be presented. The need for further refinement in the assessment of UTD will be discussed.



Abstract

Multidisciplinary Symposium 1 - Nephro-urological Conditions MR urography for congenital urinary tract anomaly in children



Day 1 2 September 2023, Saturday 1120 - 1300

Prof. Winnie CHU

*Professor,
Department of Imaging & Interventional Radiology,
The Chinese University of Hong Kong,
Hong Kong China*

MR urography (MRU) allows non-invasive and comprehensive evaluation of the urinary tract from anatomy to function. Besides having the advantage of radiation-free, MRU has a unique role in the assessment of complex paediatric congenital urinary tract anomalies as a single one-stop examination that simultaneously provides both morphological and functional information, which previously could only be acquired by a combination of imaging studies including ultrasound, CT and renal scintigraphy.

The lecture will outline the technique and common indications for MRU. A number of representative cases will be illustrated, accompanied by ultrasound correlations and surgical findings such as cases with dilated renal systems of which causes of obstruction cannot be fully delineated by ultrasound, suspected presence of ectopic ureters in girls with urinary incontinence and different presentations of duplex renal systems.

The talk will also cover some updates about MRU applications such as accuracy in detection of crossing renal vessels in cases of ureteropelvic junction obstructions (UPJO); modified prone positioning in patients with high grade pelvicalyceal dilatation; optimized scanning protocol and A.I. application for fMRU.



Abstract

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Multidisciplinary Symposium 1 - Nephro-urological Conditions Diagnosis and endovascular treatment of pediatric renovascular hypertension



Prof. Derek ROEBUCK

*Consultant Radiologist,
Perth Children's Hospital,
Australia*

Day 1 2 September 2023, Saturday 1120 - 1300



Abstract

Multidisciplinary Symposium 1 - Nephro-urological Conditions Contrast nephropathy in children - myth or reality?



Day 1 2 September 2023, Saturday 1120 - 1300

Dr. Eugene CHAN

*Associate Consultant (Paediatrics and Adolescent Medicine),
Paediatric Nephrology Centre,
Hong Kong Children's Hospital
Hong Kong China*

Contrast-induced nephropathy (CIN) is a recognised complication of acute kidney injury resulting from the administration of contrast media. Epidemiology data in the paediatric population remains scarce in the modern era. Gadolinium-based contrast media for magnetic resonance imaging, on the other hand, should be used with caution in patients with end-stage kidney disease due to the risk of developing nephrogenic systemic fibrosis. In this talk, we will discuss the rational use of contrast agents in children with kidney disease.



Abstract

Multidisciplinary Symposium 2 - Neuro-imaging /PNAHK Annual Scientific Meeting 2023

Brain tumours in children – what is our value added?



Dr. Kish MANKAD

*Clinical Lead,
Paediatric Neuroradiology,
Great Ormond Street Hospital,
UK*

Day 1 2 September 2023, Saturday 1120 - 1300

Every revision to the WHO classification of Brain Tumors expanded the tumor subtypes confronted by the reading Radiologist. While it has been a challenge to come to terms with the expanding landscape of molecularly subdivided tumor types, it is time to pause and take a reality check on what exactly is our value added. Where does Radiology fit in, in terms of localization, characterization and prediction of histology, as well as biology of these new entities, and further on, what is our bigger role in terms of response assessment to traditional and emerging therapy options. This will be the essence of my presentation.



Abstract

Multidisciplinary Symposium 2 - Neuro-imaging /PNAHK Annual Scientific Meeting 2023

The SAS, dodgy literature & the law



Day 1 2 September 2023, Saturday 1120 - 1300

Prof. Michael DITCHFIELD

*Head of Paediatric Imaging
Monash Health and Monash University,
Australia*

This presentation is about the subarachnoid space (SAS), dodgy literature and the law. It will cover how an argument is being made in Courts that Benign Enlargement of the SAS leads to spontaneous subdural haemorrhage, brain and haemorrhage, retinal haemorrhage and death.

Juries or judges in Court usually do not have a scientific background. As an expert witness in a nonaccidental injury case it is our role to explain, using our medical experience and the literature, what are the likely explanation of injuries. We now face poor quality medical literature that is used by the defence to create doubt in the minds of juries and judges and has been used to overturn convictions. The existence of this literature shines a light on our peer review process and the responsibility of journals to ensure that their publications are scientifically based.

This presentation will cover the fallacies of the defence argument and how as an expert witness we can attempt to address it.



Abstract

Multidisciplinary Symposium 2 - Neuro-imaging /PNAHK Annual Scientific Meeting 2023 Cerebral Vascular Disorders in Children



Prof. Ji Hye KIM

*Professor,
Department of Radiology,
Samsung Medical Center, Sungkyunkwan University,
School of Medicine,
Korea*

Day 1 2 September 2023, Saturday 1120 - 1300

Although Cerebral Vascular Disorders are not common in Children, it is a main cause of non-traumatic intracranial hemorrhage after neonatal period. In this lecture, I will review imaging manifestations of cerebral vascular malformations including AVM, DVA, and cavernous malformations in pediatric patients, several vasculopathies causing steno-occlusive lesions of the cerebral vessels result in childhood stroke, venous sinus thrombosis associated with variable clinical settings, and briefly discuss a role of diverse imaging modalities.



Abstract

Multidisciplinary Symposium 2 - Neuro-imaging /PNAHK Annual Scientific Meeting 2023

Neuroimaging in neurometabolic diseases



Dr. Sheila WONG

*Associate Consultant,
Department of Paediatrics & Adolescent Medicine,
Hong Kong Children's Hospital,
Hong Kong China*

Day 1 2 September 2023, Saturday 1120 - 1300

To date, more than 1,450 disorders have been included in the International Classification of Inherited Metabolic Disorders (ICIMD) and most of them exhibit different degrees of neurological involvement. More and more of those inherited neurometabolic disorders are potentially treatable. Advances in neuroimaging help neurologist in both the diagnostic and management journey of these inherited neurometabolic disorders. In this talk, the use of neuroimaging from a paediatric neurologist's perspective with case examples will be discussed.



Abstract

Lunch Symposium

Dual Source Photon-counting CT: A game changer in pediatric imaging - Pediatric Patient Experience



Day 1 2 September 2023, Saturday 1300 - 1400

Mr. Alberto Mauro

*Global Clinical Marketing Manager, Oncology,
Pulmonology and Pediatric,
Siemens Healthcare Ltd.*

Children need CT imaging that is designed with them in mind. Young patients are more sensitive to radiation, have higher heart rates, and may be unable to remain still for a scan. Children - and their parents - may also find the scanning process stressful or intimidating.

With the recent introduction of photon-counting CT, we've combined the strengths of Dual Source CT with new technology that enables lower radiation dose by eliminating electronic noise, higher spatial resolution due to smaller detector pixels, improved image contrast due to equal energy contribution, and inherent spectral sensitivity to address the challenges associated with pediatric imaging. Siemens Healthineers and its partners have also developed a holistic approach that will enable a smooth performance of imaging examinations: the Pediatric Patient Experience.



Abstract

Lunch Symposium

Dual Source Photon-counting CT: A game changer in pediatric imaging - Pediatric Patient Experience



Day 1 2 September 2023, Saturday 1300 - 1400

Ms. Alexandra Zahn

*Humanizing Healthcare Design
Senior Key Expert Patient Experience,
Siemens Healthcare Ltd.*

Children need CT imaging that is designed with them in mind. Young patients are more sensitive to radiation, have higher heart rates, and may be unable to remain still for a scan. Children - and their parents - may also find the scanning process stressful or intimidating.

With the recent introduction of photon-counting CT, we've combined the strengths of Dual Source CT with new technology that enables lower radiation dose by eliminating electronic noise, higher spatial resolution due to smaller detector pixels, improved image contrast due to equal energy contribution, and inherent spectral sensitivity to address the challenges associated with pediatric imaging. Siemens Healthineers and its partners have also developed a holistic approach that will enable a smooth performance of imaging examinations: the Pediatric Patient Experience.



Abstract

Lunch Symposium

Shaping Pediatric the MRI Next Generation of pediatric MRI



Dr. Aurelien Stalder

*Head,
MR pediatrics pre-development,
Siemens Healthcare Ltd.*

Day 1 2 September 2023, Saturday 1300 - 1400

Pediatric MRI used to be challenging due to children's anxiety, the MRI noise, the length of exams, and potential motion artifacts. This has often meant that sedation is used despite its potential risks and costs. In turn, the wide use of sedation has often resulted in fewer pediatric MRI scans for children who could benefit from this unique diagnostic imaging modality.

Fortunately, recent advances in best-practice patient preparation, and increased patient comfort, and faster more motion-robust sequences are ushering in a new era in pediatric MRI. This new era will enable more children to undergo MRIs without sedation. In this presentation, we will review recent innovations which are enabling better pediatric MRI imaging and better access to care for our young patients.



Abstract

Chest Imaging

Multimodality imaging of the mediastinum and associated abnormalities



Prof. Bernard LAYA

Head,
Section of Pediatric Radiology,
St. Luke's Medical Center-Quezon City,
Philippines

Day 1 2 September 2023, Saturday 1400 - 1540

The mediastinum is located in the central chest between the right and the left pleural cavities and spans from the thoracic inlet to the diaphragm. It contains vital structures of the circulatory, respiratory, digestive, and nervous systems. The mediastinum is a common location for non-vascular masses and vascular abnormalities in children. The non-vascular lesions include congenital malformations, infectious processes, as well as benign or malignant neoplasms. There are also various vascular mediastinal lesions, which may be either congenital or acquired. Specifically, these abnormalities can involve the systemic and pulmonary arteries and veins in various combinations.

Medical imaging plays a vital role in detection, localization, characterization, and definition of extent of these lesions in aid of prompt and appropriate management. Imaging also helps in the assessment of complications, prognostication, and in imaging aided interventions. For this lecture, various imaging techniques for the evaluation of mediastinal lesions are presented. The wide spectrum of non-vascular and vascular lesions will be discussed, with descriptions of typical imaging manifestations and current management considerations. This lecture will also present a practical and systematic approach in the evaluation of these abnormalities.



Abstract

Chest Imaging

Imaging of paediatric large airway



Day 1 2 September 2023, Saturday 1400 - 1540

Dr. Nathan David CONCEPCION

*Head and Fellowship Program Director,
Section of Pediatric Radiology,
St. Luke's Medical Center,
Philippines*

"Children are not small adults." This may be a cliché to some but it remains true not only to pediatricians but also to pediatric radiologists. With an inherent immature anatomy and immune system, disorders of the large airways in children are not uncommon, many of which can result to airway obstruction and/or respiratory distress.

Imaging thus plays a crucial role, and this talk will touch on the various imaging modalities, mainly on radiography, fluoroscopy and computed tomography, in the evaluation of the pediatric large airways, including the strengths and limitations of each modality. The use of ultrasound and magnetic resonance imaging will also be briefly tackled.

Differential diagnoses are varied, which can be categorized into congenital, infectious, neoplastic, foreign bodies and trauma. The more common and not so common pathology involving the pediatric large airways will also be discussed.



Abstract

Chest Imaging

Thoracic manifestations of systemic diseases



Prof. Maria Pilar GARCIA-PEÑA

Chief,
 CT Unit of Paediatric Radiology,
 Universitary Hospital Materno-Infantil Vall d'Hebron,
 Spain

Day 1 2 September 2023, Saturday 1400 - 1540

A wide variety of systemic diseases have thoracic manifestations in pediatrics.

The primary manifestations are diverse, and include interstitial lung disease, air space disease, lymph nodes, pleuritis, etc.

Secondary effects, such as, bronchiectasis from recurrent infections, are also common. Abnormal host defences frequently result in both an increased incidence of pulmonary infection and a change in the spectrum of infection.

It is not uncommon for pulmonary manifestations in pediatrics, to be the first sign of a systemic disease, and knowledge of the clinical and imaging features may allow the radiologist to be the first to suggest an underlying systemic disease.

The most frequent systemic diseases are connective tissue diseases (juvenile rheumatoid arthritis, dermatomyositis, systemic sclerosis, systemic lupus erythematosus, and mixed connective tissue disease), granulomatous disease, immunodeficiency disorders, cystic fibrosis, immotile cilia syndrome, Langerhans cell histiocytosis, sickle cell disease, phacomatoses, storage disorders, and vasculitis.

This lecture has two important points: first, to aid the reader in interpreting imaging findings of known systemic diseases in which the lung manifestations are common, and second, to provide a guide on imaging appearance to allow the reader to suggest the possibility of an undiagnosed systemic disease. For each condition or group of conditions, the general feature of the condition will be described, followed by a review of the imaging appearance of the thoracic manifestations.

High-resolution CT is the method of choice for accurate assessment of diffuse parenchymal disease. The uses of CT in evaluating systemic disease are to detect lung abnormalities, characterize the findings, assess



Abstract

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Chest Imaging

Chest imaging in immunocompromised children : focused on pediatric transplantation



Dr. Edward LEE

*Associate Professor of Radiology,
Department of Radiology,
Boston Children's Hospital and Harvard Medical School,
USA*

Day 1 2 September 2023, Saturday 1400 - 1540



Abstract

Abdominal Imaging Emergency Abdominal Ultrasound



Day 1 2 September 2023, Saturday 1400 - 1540

Dr. Stephen SIMONEUX

*Professor,
Radiology and Pediatrics,
Emory University,
USA*



Abstract

Abdominal Imaging

Diagnostic imaging of neonatal cholestasis



Day 1 2 September 2023, Saturday 1400 - 1540

Dr. Shunsuke NOSAKA

*Director,
Department of Radiology,
National Center for Child Health and Development,
Japan*

Neonatal cholestasis affects 1 in every 2500 term infants and manifests as direct bilirubin exceeds 1.0 mg/dL persisting after the age of 2 weeks. Clinical signs include jaundice, dark urine, and acholic stools. The most common cholestatic condition is biliary atresia (BA). Non-BA causes include a variety of conditions such as neonatal hepatitis, Alagille syndrome, progressive familial intrahepatic cholestasis (PFIC), choledochal cyst, inspissated bile syndrome, cholelithiasis and so forth.

A fasting abdominal ultrasound (US) is the first-line diagnostic imaging modality to investigate the biliary system. Based on the initial US findings, indication of additional US after oral feeding, hepatobiliary scintigraphy, MRCP and contrast enhanced CT is discussed.

This lecture will demonstrate typical as well as atypical diagnostic imaging findings of BA to differentiate from non-BA causes.



Abstract

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Abdominal Imaging Congenital portosystemic shunts



Day 1 2 September 2023, Saturday 1400 - 1540

Prof. Stephanie FRANCHI-ABELLA

*Head,
Department of Pediatric Radiology,
Bicêtre Hospital,
France*

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Abstract

Abdominal Imaging

Paediatric MR enterography - update and challenges



Dr. Helen WOODLEY

*Consultant Paediatric Radiologist,
Leeds Children's Hospital,
UK*

Day 1 2 September 2023, Saturday 1400 - 1540

MR Enterography (MRE) is well established in adult practice for the evaluation of Inflammatory Bowel Disease (IBD) and now largely the preferred modality of choice in evaluation of paediatric IBD which is increasing in incidence globally. MRE is used for the diagnosis of IBD, for the assessment of extent and activity of disease, for the review of complications of the disease and to evaluate the response to treatment. MRE is now incorporated into many practice guidelines and recent interest is displayed in the development of further MRE imaging biomarkers.

In this lecture we shall discuss paediatric MRE technique including patient preparation and optimization of sequences, review the typical diagnostic MRE findings in IBD, discuss current practice guidelines for investigation and follow up of IBD. New diagnostic techniques and the development of potential imaging biomarkers such as intestinal motility, diffusion weighted imaging and magnetisation transfer will be explored. Particular difficulties encountered in paediatric MRE will be discussed including optimising bowel distension, the use of techniques to reduce movement artefact and the utilization of general anaesthesia. Finally further clinical indications for MRE outside of IBD in paediatric practice will be considered.



Abstract

Foetal and Post-mortem Imaging Fetal TORCHZ infections



Prof. Andrés GARCÍA-BAYCE

Chair,
 Pediatric Imaging Clinic,
 University of the Republic,
 Uruguay

Day 1 2 September 2023, Saturday 1600 - 1700

Congenital infections caused by certain agents with some similar clinical findings are referred to with the acronym TORCH (Toxoplasmosis, Other (varicella, syphilis, parvovirus), Rubella, Cytomegalovirus, Herpes simplex virus and HIV). Sometimes spelled TORCHS, with S for syphilis, lately it has been changed to TORCHZ, for the emerging Zika virus.

TORCHZ infections frequently produce neurologic effects as cerebral calcifications, ventriculomegaly, subependymal cysts and microcephaly.

Cytomegalovirus is the most common congenital infection, present in 2 - 4 % of live births. It is asymptomatic in 90% of cases, or may present with jaundice, microcephaly or deafness. Its main findings in US and CT are intracerebral calcifications, subependymal cysts, perithalamic vessel calcifications, white matter hypodensity, as well as ventriculomegaly and cortical atrophy. In MRI it may present with migration abnormalities, white matter lesions and delayed myelination.

Zika is an arbovirus transmitted by the Aedes aegypti mosquito. Its infection is asymptomatic in 80% of cases, or may present as maternal fever, skin rash, arthralgia or conjunctivitis. It may provoke microcephaly, atrophy, ventriculomegaly, calcifications, dysgenesis of corpus callosum and eye deformities, as well as development malformations. The microcephaly may cause a characteristic excess of skin on the scalp on prenatal US, as well as a fronto-nasal rectification. Zika is a strongly neurotropic agent, and characteristically respects the rest of the organs of the foetus and the placenta.

Toxoplasmosis is a parasitic infection that may present with findings similar to cytomegalovirus and zika. It may produce progressive hydrocephalus, calcifications, parenchymal abscesses and cataracts. In prenatal US a thick placenta may be noticed, as well as intestinal hyperechogenicity, ascitis, pericardial effusion and hepatomegaly.



Abstract

Foetal and Post-mortem Imaging

Postmortem imaging for beginners: a whistlestop tour



Day 1 2 September 2023, Saturday 1600 - 1700

Dr. Susan SHELMERDINE

*Consultant Radiologist,
Great Ormond Street Hospital for Children,
UK*

A variety of different perinatal post-mortem imaging techniques are available for the investigation of perinatal deaths is an acceptable tool amongst parents and religious groups, enabling a less invasive autopsy examination. Nevertheless, availability and guidelines are scarce, and radiologists new to do post-mortem imaging find it difficult to understand what is best practice. This lecture will present a comprehensive overview of perinatal post-mortem imaging, summarising the latest research and what imaging modalities can help for different specific indications.

Useful/Suggested References:

Shelmerdine SC, Hutchinson JC, Lewis C, Simcock IC, Sekar T, Sebire NJ, Arthurs OJ. A pragmatic evidence-based approach to post-mortem perinatal imaging. *Insights Imaging*. 2021 Jul 15;12(1):101.

Shelmerdine SC, Arthurs OJ. Post-mortem perinatal imaging: what is the evidence? *Br J Radiol*. 2022 May 5;20211078. doi: 10.1259/bjr.20211078.



Abstract

Foetal and Post-mortem Imaging

Foetal Medicine, Pathology, Radiology & Genetics/Genomics (FMPRG) – Our local experience



Dr. Elaine KAN

*Chief of Service,
Department of Radiology,
Hong Kong Children's Hospital,
Hong Kong China*

Day 1 2 September 2023, Saturday 1600 - 1700

The Hong Kong Children's Hospital (HKCH) commenced services in 2018. Operating in a hub-and-spoke model consisting of HKCH as a tertiary referral centre and regional hospitals, children with complex, serious and uncommon disease are referred to HKCH for multidisciplinary care.

With the conviction that a multidisciplinary approach to managing the abnormal foetus would optimise outcome in diagnosis, management and counselling, the Department of Pathology of HKCH led a multidisciplinary team made up specialists from Foetal Medicine, Pathology, Radiology and Genetics (abbreviated as FMPRG) from different hospitals across HK to pioneer a foetal pathology service in 2019. Since April 2021, the HK Hospital Authority started a publicly funded next- generation sequencing (whole exome sequencing (WES) and whole genome sequencing (WGS)) as a sequential test in the investigation of foetal structural anomalies in all pregnant women, enhancing prenatal diagnosis for special prenatal cases with the presence of foetal ultrasound anomalies after receiving a negative finding by conventional tests (CMA and karyotyping).

In this presentation, the FMPRG workflow and service is introduced, results of a one- year clinical performance and the clinical utility of WES/WGS to identify the genetic diagnosis for undiagnosed foetal structural anomalies will be presented, illustrated by cases with radiological investigations.



Abstract

Covid Special Focus Session

Essentials and updates in pediatric COVID-19 and MIS-C imaging: what radiologists need to know



Dr. Abbey WINANT

*Attending Physician,
Department of Radiology,
Boston Children's Hospital
USA*

Day 2 3 September 2023, Sunday 0740 - 0800

This talk will provide an up-to-date review of the clinical features and imaging evaluation of two important clinical sequelae of SARS-CoV-2 infection in children: acute pediatric COVID-19 infection and multisystem inflammatory syndrome in children (MIS-C), a postviral hyperinflammatory syndrome seen in some children after recovery from COVID-19 infection. Recognition of the salient imaging differences between pediatric COVID-19 and MIS-C will be emphasized and understood by highlighting the differences in the underlying pathophysiology of these two distinct but related clinicopathologic entities. Understanding of the unique clinical and imaging manifestations of pediatric COVID-19 infection and MIS-C is critical for early and accurate diagnosis of these important entities and improving patient care.



Abstract

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Breakfast Symposium

Contrast media in paediatric neuroradiology potentialities & cautions



Dr. Kish MANKAD

*Clinical Lead,
Paediatric Neuroradiology,
Great Ormond Street Hospital for Children,
UK*

Day 2 3 September 2023, Sunday 0800 - 0900



Abstract

MSK Imaging

Diagnostic errors in children: if I could read this case again



Day 2 3 September 2023, Sunday 0900 - 1020

Dr. Supika KRITSANEPAIBOON

*Associate Professor,
Section of Pediatric Imaging, Division of Diagnostic Radiology,
Department of Radiology, Songklanagarind Hospital,
Faculty of Medicine, Prince of Songkla University,
Thailand*

Imaging techniques are always required to be improved with advancing technology. The stronger the static magnetic field of MRI becomes, the more detailed images are expected. There are always conflicts between field of view, resolution and imaging time in MRI, pushing radiographers and engineers forward to find solutions. In this presentation, MRI imaging techniques on small parts, especially for paediatrics or even infants, will be shared with support of previous cases imaged in the Children's Hospital. Tips on patient preparation and patient care will also be included to avoid blurred images and exam abortion.

Further readings

Taylor GA, Voss SD, Melvin PR, Graham DA. Diagnostic errors in pediatric radiology. *Pediatr Radiol*. 2011 Mar;41(3):327-34.

Engelkemier DR, Taylor GA. Pitfalls in pediatric radiology. *Pediatr Radiol*. 2015 Jun;45(6):915-23.



Abstract

MSK Imaging

Vascular anomalies in children (with focus on sclerotherapy)



Prof. Ashley ROBINSON

*Division Chief,
Interventional Radiology,
Sidra Medicine,
Qatar*

Day 2 3 September 2023, Sunday 0900 - 1020

Learning objectives:

1. Review of ISSVA classification of vascular anomalies
 - a. Review which vascular anomalies are treatable by IR
 - b. Review which vascular anomalies are treatable with sclerotherapy
2. Imaging & workup for sclerotherapy in (OPC clinic setting)
 - a. H&E
 - b. Diagnostic imaging
 - c. Risks reviews & consent
 - d. Pre-procedural parameters
3. Sclerotherapy procedure (IR suite setting)
 - a. Lymphatic malformation
 - i. Agents & preparation
 - ii. Techniques
 - b. Venous malformation
 - i. Agents & preparation
 - ii. Techniques



Abstract

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MSK Imaging

Imaging in paediatric bone tumour



Day 2 3 September 2023, Sunday 0900 - 1020

Prof. Hamzaini ABDUL HAMID

*Professor,
Universiti Kebangsaan Malaysia,
Malaysia*

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Abstract

MSK Imaging

Rare skeletal dysplasias, why do we care?



Dr. Joyce CHAN

*Consultant,
Department of Radiology,
Hong Kong Children's Hospital,
Hong Kong China*

Day 2 3 September 2023, Sunday 0900 - 1020

Skeletal dysplasia - a commonly encountered term in paediatric radiology, is often feared of and notorious for difficult diagnosis. It comprises of a large number of constitutional errors of bone development resulting from genetic mishaps. Each entity in this huge group of diseases is rare, together with the accessibility of modern age genetic testing, the importance of a radiologist's input in them is often undermined. My presentation would focus on why this group of diseases is important and how a radiologist's input would make a difference. I will also share how a multi-disciplinary team approach to skeletal dysplasia management would facilitate early and accurate diagnosis, in turn translating to a huge improvement of the outcome of these patients.



Abstract

Radiographer's Stream I

Fluoroscopic assessment in speech/swallowing for oncology patients

Day 2 3 September 2023, Sunday 0900 - 1020



Ms. Yoyo YIU

*Speech Therapist,
Allied Health Department,
Hong Kong Children's Hospital,
Hong Kong*

Pediatric oncology patients often experience speech and swallowing impairments due to their cancer diagnosis, including dysarthria and dysphagia. Dysarthria is characterized by hypernasality, which results from impaired neurological control over the palate movement. Dysphagia often manifests in the aspiration of food or liquid into the airway, leading to pneumonia.

Multiview videofluoroscopy (MVF) and videofluoroscopic swallow studies (VFSS) are critical tools for managing pediatric cancer patients. These fluoroscopic assessments allow for real-time visualization of speech and swallowing mechanisms, providing valuable information on underlying pathology and the efficacy of interventions. In this presentation, we will explore the use of MVF and VFSS in pediatric oncology patients, including their indications, techniques, interpretations, and limitations. We will discuss typical case studies of patients of different ages, along with their videos. This presentation is intended for radiographers and radiologists who work with pediatric oncology patients, providing essential knowledge and skills to optimize the use of these fluoroscopic assessments in their practice.



Abstract

Radiographer's Stream I

Preparing paediatrics patients for radiotherapy using virtual reality simulation



Dr. Vincent LEUNG

*Assistant Professor of Practice,
 The Hong Kong Polytechnic University,
 Hong Kong*

Day 2 3 September 2023, Sunday 0900 - 1020

Preparing pediatric patients for radiotherapy can be challenging due to the need for active patient cooperation, including staying still and following instructions. Anesthesia is often required if children are unable to comply, which is suboptimal considering the lengthy duration of radiotherapy courses, which can be up to 30 sessions. To address this issue, the Hong Kong Polytechnic University (PolyU) initiated a volunteer service utilizing hybrid immersive virtual environments to conduct a two-hour rehearsal for pediatric patients.

In collaboration with clinical partners and non-government organizations, personalized support was designed to assist these patients. The primary objectives were to enable patients to rehearse the radiotherapy procedure and reduce the need for anesthesia, while empowering both patients and caregivers through enhanced understanding of the treatment.

A total of 20 cases were conducted using the virtual reality simulation, with 17 cases successfully completed without the need for anesthesia. This outcome demonstrates the potential of virtual reality as an effective tool in preparing pediatric patients for radiotherapy. By providing a realistic and interactive environment, the virtual reality simulation allows children to familiarize themselves with the treatment process, reducing anxiety and improving their ability to cooperate during the actual radiotherapy sessions.

The use of virtual reality not only minimizes the reliance on anesthesia, which can have associated risks and complications, but also empowers patients by actively involving them in their own treatment. Additionally, caregivers benefit from a better understanding of the radiotherapy procedure, enabling them to provide necessary support and reassurance to their children.

This novel approach, implemented through collaboration between PolyU, clinical partners, and non-government organizations, has shown promising results in enhancing the preparation and cooperation of pediatric patients for radiotherapy. Further research and implementation of virtual reality simulation in pediatric radiotherapy can lead to improved treatment experiences, reduced anesthesia requirements, and better outcomes for young patients.



Abstract

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Radiographer's Stream I

The prospects of proton therapy development for pediatric oncology in Hong Kong



Dr. Michael KAM

*Consultant Clinical Oncologist,
Hong Kong Sanatorium & Hospital,
Hong Kong China*

Day 2 3 September 2023, Sunday 0900 - 1020



Abstract

Multidisciplinary Symposium 3 - Paediatric Oncology Imaging of common abdominal tumors in children



Dr. Preeyacha PACHARN

*Associate Professor,
 Department of Radiology
 Siriraj Hospital,
 Thailand*

Day 2 3 September 2023, Sunday 1050 - 1230

Abdominal tumors are the third most common childhood cancer after hematologic and CNS tumors. The three most common abdominal solid tumors are neuroblastoma, Wilms tumor, and hepatoblastoma. Neuroblastoma is the most common extracranial solid tumor in children. It is an embryonal tumor of the sympathetic nervous system that can arise from multiple locations. Approximately half of the tumors arise from the adrenal gland.

The International Neuroblastoma Risk Group (INRG) proposed a new staging system for neuroblastoma in 2009 called the International Neuroblastoma Risk Group Staging System (INRGSS) which is the pretreatment stage before surgery or chemotherapy. The INRGSS is based on Image-Defined Risk Factors (IDRFs) which are imaging features that describe the relationship of a tumor with vital structures and will increase the risk for surgery.

Wilms tumor is the most common renal tumor in infants, children, and adolescents. The tumor arises from poorly differentiated mesenchymal renal cells. It is associated with multiple anomalies and syndromes. Two major guidelines for management and staging are the Children's Oncology Group (COG) and the International Society of Paediatric Oncology (SIOP). The COG staged patients using primary surgery, and the SIOP recommended preoperative chemotherapy before radical nephrectomy.

Hepatoblastoma is the most common primary liver tumor in children. It is an embryonal tumor, derived from hepatic precursor cells with varying degrees of differentiation. Patients usually have elevated serum alpha-fetoprotein (AFP).

The PRETEXT (Pre-Treatment EXtent of tumor) system has been used for hepatoblastoma staging since 1992, and the latest version is 2017. There are two components, including the PRETEXT group, which describes the location, and annotation factors, which describe associated features of the tumors.

The details of tumor staging and differential diagnoses will be described in the presentation.



Abstract

Multidisciplinary Symposium 3 - Paediatric Oncology Whole body MRI in paediatric oncology



Day 2 3 September 2023, Sunday 1050 - 1230

Prof. Joanna KASZNIA-BROWN

*Senior Consultant Radiologist,
University of Bristol,
UK*

Whole body MRI has been introduced over two decades ago and has proven to be an excellent imaging modality in paediatric radiology. It is now one of the main investigations in paediatric oncology, with significant increase in number of performed examinations worldwide.

It offers not only an initial diagnosis, staging of local and metastatic disease, but also provides a guidance to invasive procedures and plays significant role in surveillance pathways. It's an invaluable tool in evaluation and monitoring response to treatment, allowing early modification and adjustments to provided therapy, by utilisation of new advances in functional and hybrid imaging.

Whole body MRI is now recommended in screening in cancer predisposition syndromes, being able to provide anatomical and functional data before onset of clinical manifestations.

New advances and modern developments in MRI physics, provide faster and better scanning sequences, allowing to cover a large field of view, within a short time and with an excellent spatial and contrast resolution. A short acquisition time and elimination of movement artifacts allows an adequate visualisation of various organs, as lungs or small bowel, and adequate visualisation of vascular and lymphatic system.

There are multiple new sequences and protocols available on the market, which need to be carefully evaluated and utilised to provide the best diagnostic value and avoid misinterpretation errors. Understanding modern technology is a key to success and best patients' care.

Choosing the best sequences and protocols in rapidly developing technology, remain a diagnostic challenge. In this lecture, we will present a wide range of available sequences and review the current recommendations by professional societies and organisations. New pathways in oncology imaging and indications for Whole Body MRI examination will be discussed, in aim to create an optimal imaging protocol.



Abstract

Multidisciplinary Symposium 3 - Paediatric Oncology Small wound for small patients-role of IR in children with cancer



Dr. Kevin FUNG

*Associate Consultant,
Department of Radiology,
Hong Kong Children's Hospital,
Hong Kong China*

Day 2 3 September 2023, Sunday 1050 - 1230

Interventional Radiology (IR) has revolutionised the management of children with cancer. With its minimally invasive nature, image-guided interventions are now the standard of care for many procedures which are traditionally delivered by paediatric surgeons, including vascular access, tumour biopsies and enteric access. Moving into the realm of interventional oncology, IR also has a growing role to play in management of locoregional tumour control through thermal ablative therapies and chemo-embolisation. This lecture will give an overview on how paediatric IR can help in management of children with cancer, the growing scope of paediatric interventional oncology and practical tips and tricks when performing image-guided interventions.



Abstract

Multidisciplinary Symposium 3 - Paediatric Oncology Immunotherapy for childhood solid tumors

Day 2 3 September 2023, Sunday 1050 - 1230



Prof. Godfrey CHAN

*Honorary Clinical Professor,
 Department of Paediatrics and Adolescent Medicine,
 School of Clinical Medicine,
 The University of Hong Kong,
 Hong Kong China*

Despite markedly improved outcome in childhood cancers, many solid tumors in children remain difficult to treat. In recent years, various forms of immunotherapy have emerged. They include active immunotherapy such as the use of cytokines. They are mainly used as an adjunct to other forms of therapy such as monoclonal antibodies. Then we have passive immunotherapy including the use of monoclonal antibody against specific cancer antigens. However, only very few pediatric cancers express tumor specific antigens, and it is seldomly effective as a sole treatment due to either antigen escape or cancer cells being protected within immuno-privilege cancer microenvironment. Cellular immunotherapy such as allogeneic hematopoietic stem cells transplant or allogeneic natural killer cells infusion using haploidentical parental donors with killer immunoglobulin receptor (KIR) or ligand mismatch status is another latest advance. However, KIR mis-matched donor is difficult to find in Chinese & Eastern Asians, so it is a major barrier to overcome. In addition, sophisticated technical support and expensive cost are another limitation. The use of chimeric antigen receptor-T cells (CAR-T) & immune check-point inhibitors for pediatric solid tumors are in process and there are still hindrances to overcome mainly due to the complex immune suppressive cancer micro-environment. Oncolytic viruses and bacteria are another innovative approach but remain in experimental stage. In summary, immunotherapy involves a variety of approaches and each of them have unique advantages and limitations. Understanding the underlying mechanisms will help to design a better approach. The side effects of immune therapy are significant and different from conventional therapy. Combining different immune therapy may yield better results but economic consideration remains a concern at present.



Abstract

Multidisciplinary Symposium 4 - State of the Art Renal CEUS in children



Dr. Jeevesh KAPUR

*Assistant Professor and Senior Consultant,
 Department of Diagnostic Imaging,
 National University Hospital,
 Singapore*

Day 2 3 September 2023, Sunday 1050 - 1230

Conventional ultrasound has been the mainstay of imaging renal system and abdominal organs in clinical practice, more so in the pediatric age group. With its advantages of being a non radiating modality and real time imaging, ultrasound has made itself absolutely essential in radiological evaluation in children. The advent of microbubble contrast enhanced ultrasound (CEUS) has added new dimension to this essential role and offers insights to enhancing patterns of organs and masses similar to, if not better than, conventional CT and MRI. The talk provides an overview of the use of contrast enhanced ultrasound for assessment of renal diseases in children.

CEUS has proven to be an excellent tool in assessment of renal perfusion, renal infection (abscess), solid and cystic renal masses (cysts, angiomyolipomas, neoplastic lesions) and pseudomasses. It is more accurate than any other modality in assessment and classification of cystic renal lesions and can more accurately differentiate between Bosniack Type I, Type II and Type IIF lesions. CEUS could be the modality of choice for assesment of solitary renal lesions and has been shown to be safe with extremely low incidence of allergic reactions. "



Abstract

Multidisciplinary Symposium 4 - State of the Art US contrast in the management of paediatric extra-cranial tumour

Day 2 3 September 2023, Sunday 1050 - 1230



Dr. Wendy LAM

*Consultant Radiologist,
 Department of Radiology,
 Hong Kong Children Hospital,
 Hong Kong China*

Use of ultrasound (US) contrast in children is a new development. US contrast agents consist of microbubbles containing air or various gases within as hell. When a US contrast agent is administered into the vasculature, it enhances the backscatter of the ultrasound waves by resonance within sonic windows [1]. This results in a marked amplification of the signals from the blood flow and provides additional information about the microvasculature [2]. By using dynamic contrast US (DCE-US), both vascularization and relative perfusion can be imaged [3].

Paediatric CEUS is also an "off-label" application until recently with approval specifically for assessment of focal liver lesions. SonoVue was approved by FDA in the use of hepatic investigations in children [4] and US of the urinary tract (voiding ultrasonography) for the evaluation of suspected or known vesicoureteral reflux (VUR) [5]. Recently highlighted by the European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB) that contrast enhanced US (CEUS) was safe and effective for the examination of many organs in children [6,7]. Contraindications of intra-arterial CEUS included right-to-left vascular shunt and allergic reaction. This lecture is to demonstrate the use of intra-arterial CEUS in some pediatric extra-cranial tumors cases.

Previous studies using dynamic contrast enhanced (DCE-MR) demonstrated that malignant tumors usually showed faster and higher levels of enhancement than normal tissue [8]. This enhancement characteristic indicated that malignant tumors increased vascularity and endothelial permeability to the contrast molecules than that of normal or less aggressive malignant tissues. The relationship could be due to the rapid tumor growth which could only be supported by highly active angiogenesis. The more aggressive tumors were therefore associated with higher angiogenesis related microvasculature abnormalities.

The use of DCE-US is a new functional technique enabling a quantitative assessment of solid tumor perfusion using raw linear data in adults. The usefulness of DCE-US in pediatric patients had not been determined. This lecture will share Hong Kong experience on the comparison between dynamic CEUS with DCE-MRI [9].

The aim of this study was to compare DCE-US curve parameters with different curve patterns of DCE-MR



and to assess if it can achieve the same purpose as in DCE-MR. As US examination is without irradiation and more accessible than MR, we want to explore the possible role and benefits of DCE-US in the diagnosis and treatment monitoring of pediatric extra-cranial tumors.

Our results demonstrated that the use of DCE-US in the assessment and monitoring of pediatric extra-cranial tumor was safe and feasible. DCE-US curve parameters such as slope of increase and peak intensity showed statistically significant correlation with type 3 DCE-MR curve. This finding suggested that they might have similar reproducibility in tumor perfusion and comparable utility in the assessment of a board range of pediatric extra-cranial aggressive malignant tumors. With shorter time and more easily accessible than MR, as well as lack of irradiation compared to PET-CT or CT, DCE-US may have potentially significant benefits for pediatric oncology patients. However, the true effectiveness of DCE-US has yet to be determined by studies with larger scale.

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Abstract

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Multidisciplinary Symposium 4 - State of the Art Practical MR of the paediatric chest



Day 2 3 September 2023, Sunday 1050 - 1230

Prof. Kushaljit Singh SODHI

*Professor,
Department of Radiodiagnosis,
Post Graduate Institute of Medical Education & Research,
India*

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Abstract

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Multidisciplinary Symposium 4 - State of the Art FAPI PET imaging in cancer



Prof. Pek-Lan KHONG

*Head and Senior Consultant,
Department of Diagnostic Imaging,
National University Hospital,
Singapore*

Day 2 3 September 2023, Sunday 1050 - 1230



Abstract

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Child Life service in Radiology - Let's play!

Hospital play service : enhancing positive patient experience in mri and its potential application



Day 2 3 September 2023, Sunday 1230 - 1300

Ms. Chiko CHONG

*Training Manager (Hospital Play),
Playright Children's Play Association,
Hong Kong China*

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Abstract

Child Life service in Radiology - Let's play! Child life service supports paediatric patients in radiology



Day 2 3 September 2023, Sunday 1230 - 1300

Ms. Carmen MA

*Assistant Professional Service Manager (Child Life),
Children's Cancer Foundation,
Hong Kong China*

How to Support young patients to complete the 'impossible mission: radiology', especially for oncology patients who need to have the moulding and undergo 20-30 times radiotherapy alone? Except to use sedation, how to make the patients cooperate with you? The sharing will let you know how to prepare the young patients and their parents in a patient and family-centered care approach, and what is the key to accompanying them to conquer these challenges.



Abstract

Lunch Symposium

Imaging diagnosis of children congenital heart disease in mainland China and update on the pediatric MRI imaging



Prof. Ming ZHU

*Professor,
 Shanghai Children's Medical Center,
 Shanghai Jiao Tong University,
 China*

Day 2 3 September 2023, Sunday 1300 - 1400

CHD is the most common birth defect in China. Echocardiography is the first imaging choice. In mainland China, most patients with CHD use CT instead of MRI as a supplement to echocardiography. This is the reason for equipment and waiting time. We need more MRI equipment. In this lunch symposium, I want to show some examples about how to use CT to evaluate cardiac function since we have to do a lot of CHD CT. CT can provide some functional information such as oxygen saturation and pressure mainly based on changes in contrast density within chambers. If descending aorta (DAO) density was not consistent with left atrium (LA), either high or low, suggesting cyanosis. In pulmonary hypertension with reverse shunting in PDA, DAO and AAO density were inconsistent and lower body is cyanosis. Sometimes innominate and left subclavian artery densities were inconsistent, indicating difference oxygen saturation between left and right hands. In DORV, which great artery has same density with LV, the VSD was under this artery. In Abstrain, the density difference can determine the boundary of the atrialization RV. CT can show some cardiac function. If we want to do better job about CHD, we still need more MR equipment.

A good pediatric MR, the scanning speed should be fast, the image quality should be good, the hardware and software should be designed for newborns and small babies, and the equipment price should be cheap enough. When the MR bore size is reduced (such as Neona of Time Medical Company), not only the production cost is reduced, but also the magnetic field homogeneity and gradient field strength are significantly improved. The image quality and scanning time improved.



Abstract

Head & Neck Imaging

Pediatric conductive hearing loss – where to look and what to look for



Dr. Amy JULIANO

*Head and Neck Radiologist, Director of Research and Academic Affairs,
 Department of Radiology,
 Massachusetts Eye and Ear, Harvard Medical School,
 USA*

Day 2 3 September 2023, Sunday 1400 - 1500

Sound waves perturb air along the external auditory canal toward the tympanic membrane, vibrating the ossicles, causing pressure on the oval window. Fluid in the inner ear is then perturbed, transmitted by perilymph along the scala vestibuli toward the helicotrema and then down the scala tympani toward the round window, leading to a gradient across the basilar membrane which translates to sensorineural signal. This is the chain for air conduction. In this lecture, we will focus on imaging anatomy along this conductive chain – the “path of a sound wave” – and focus on pathologies affecting this conductive chain in the pediatric population. We will review disease entities affecting the EAC, tympanic membrane, middle ear, ossicular chain, oval window, and round window.

The presence of a “third window” in the otic capsule can lead to leakage of sound wave energy, resulting in an inner ear cause of conductive hearing loss. We will examine this briefly. Bone conduction leads to a perturbation of the skull/otic capsule by sound, causing direct pressure on the cochlea, leading to a gradient across the basilar membrane which translates to sensorineural signal. Some entities affecting bone in the otic capsule can lead to reduced bone conduction, which has an element of a “diffuse third window”. We will examine this briefly as well.



Abstract

Head & Neck Imaging

Imaging of congenital pharyngeal arch-related anomalies



Dr. Tatsuo KONO

Director,
Department of Radiology,
Tokyo Metropolitan Children's Medical Center,
Japan

Day 2 3 September 2023, Sunday 1400 - 1500

Pharyngeal arch-related anomalies result from developmental disorders of the embryonic pharyngeal apparatus. The embryonic pharynx consists of three pharyngeal apparatus components: the pharyngeal arch, cleft, and pouch. They are circumferential cellular ridges (mesoderm), grooves between arches in the external surface (ectoderm), and those in the internal surface (endoderm), respectively. Practically, the components consist of five arches, four pairs of clefts and pouches.

THE PHARYNGEAL ARCH develops its own artery, a cranial nerve, and muscle / cartilage. Anomalies of the pharyngeal arch show a spectrum of hypoplasia / dysplasia of the pharyngeal arch structures. Major manifestations are failure of fusion, hypoplasia, and remnant. Anomalies of the pharyngeal arches commonly occur simultaneously as a malformation syndrome (e.g., Treacher Collins syndrome, Oculo-Auriculo-Vertebral spectrum, and Branchio-Oto-Renal syndrome).

THE PHARYNGEAL CLEFT contributes to external surface. The 1st cleft forms the external auditory canal (EAC). Its developmental failure results in atresia / stenosis of the EAC. A 1st pharyngeal cleft cyst has a fistulous communication to the floor of the EAC. Failure of obliteration of the rest of the cleft(s) results in a pharyngeal cleft cyst. Most of lateral cervical cysts are attributed to pharyngeal cleft cysts, commonly the 2nd cleft cyst.

THE PHARYNGEAL POUCH is an internal counterpart of the pharyngeal cleft. The 1st pouch forms Eustachian tube, mastoid antrum, and the inner layer of the tympanic membrane. The 2nd pouch forms palatine tonsils. Both pouches contribute to the middle ear. The ventral wing of the 3rd pouch forms the thymus. The inferior and superior parathyroid glands are attributed to the 3rd and 4th pouches, respectively. Each pouch extends away from the pharynx with a communication via an elongated duct. Failure of elongation results in ectopic parathyroid gland / thymus, and failure of regression results in residual thymopharyngeal duct and pyriform sinus fistula.



Abstract

Head & Neck Imaging US approach to pediatric thyroid nodule



Prof. Monica EPELMAN

*Professor of Radiology,
University of Central Florida,
USA*

Day 2 3 September 2023, Sunday 1400 - 1500



Abstract

Radiographer's Stream II Contrast-enhanced voiding urosonography



Dr. Kin-Hung LIU

*Consultant Radiographer,
Department of Imaging and Interventional Radiology,
Prince of Wales Hospital,
Hong Kong*

Day 2 3 September 2023, Sunday 1400 - 1500

Contrast-enhanced Voiding Urosonography (ceVUS) is a well-established intra-cavity application of ultrasound contrast agents (UCA) for detecting vesicoureteric reflux (VUR) and urethral abnormality. It is sonographic equivalent to voiding cystourethrography (VCUG), and is now replacing VCUG in paediatric patients. The imaging techniques of ceVUS, interpretation of ceVUS findings, diagnostic accuracy of ceVUS, the advantages and disadvantages of ceVUS over VCUG will be discussed.



Abstract

Radiographer's Stream II Cardiac CT imaging



Mr. Mike LAI

*Senior Radiographer,
Department of Radiology,
Hong Kong Children's Hospital,
Hong Kong China*

Day 2 3 September 2023, Sunday 1400 - 1500

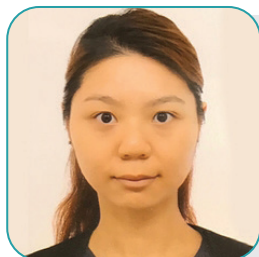
Cardiac CT is the most complicated procedure for CT imaging and Paediatric cardiac CT is even more challenging due to the nature of the patients who may not be able to obey the command and keep still during the whole examination procedure. Several challenges for Paediatric cardiac CT include: The timing of blood flow may be different significantly for patients even with similar body size; wide range of pathology and congenital anomalies for paediatrics and most important of all is the size and body weight of the patient may pose a limitation on the rate and dose of contrast that can be delivered during the cardiac CT examination.

In 2019, Hong Kong Children's Hospital commenced the CT services for Paediatric cardiac patients. Through the collaboration of Radiographers and Radiologists, we have developed a set of protocols to optimize the radiation dose, contrast dose and examination routines for our Paediatric patients. After three years, we successfully developed our imaging protocols for cardiac patients even for patient under ECMO conditions.



Abstract

Radiographer's Stream II MRI microscopic imaging



Ms. Maggie CHIU

*Radiographer,
Department of Radiology,
Hong Kong Children's Hospital,
Hong Kong China*

Day 2 3 September 2023, Sunday 1400 - 1500

Imaging techniques are always required to be improved with advancing technology. The stronger the static magnetic field of MRI becomes, the more detailed images are expected. There are always conflicts between field of view, resolution and imaging time in MRI, pushing radiographers and engineers forward to find solutions. In this presentation, MRI imaging techniques on small parts, especially for paediatrics or even infants, will be shared with support of previous cases imaged in the Children's Hospital. Tips on patient preparation and patient care will also be included to avoid blurred images and exam abortion.



Abstract

Quality and Safety in Paediatric Radiology Beyond dose: the quality paradigm for pediatric CT



Prof. Donald FRUSH

*John Strohbehn Professor of Radiology,
 Division of Pediatric Radiology, Department of Radiology,
 Duke University Medical Center,
 USA*

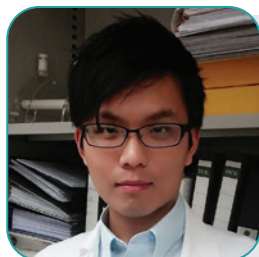
Day 2 3 September 2023, Sunday 1530 - 1650

Medical imaging is both invaluable and essential in the healthcare of children. The majority of imaging examinations depend on the use of ionizing radiation. Because the level of ionizing radiation used in medical imaging has a familiar and often anxiety-provoking pulse of the potential detrimental biological effects, imaging professionals have a responsibility as custodians to protect both the quality, that is the diagnostic yield of the examination, as well as safety, through minimizing or eliminating excess radiation exposure. One major tool for pursuing radiation protection is through the diagnostic reference level, (DRL). The metrics for DRLs are those of radiation exposure, such as the CTDI_{vol} or DLP for computed tomography. While DRLs are currently the most widely used model for institutional, local/regional, or national audit of imaging performance, there are challenges. One of the major deficits of the DRL appellation is that the “diagnostic” part is only through the surrogacy of the dose/exposure metrics whereas the more comprehensive performance of imaging depends on both image quality and dose/exposure. Therefore, efforts should be directed to accountability for contributions of image quality in addition to dose/exposure for true “performance” reference levels. Development of such should be owned by the medical imaging community (emphasizing a timely, expert and consensus voice to avoid having such quality assessment decided by others), emphasizing efficient (e.g., automated), and effective (e.g. representative) measures to augment and improve our ability to demonstrate responsible and representative image care for all ages.



Abstract

Quality and Safety in Paediatric Radiology Radiation dose monitoring in children



Mr. Adson LEUNG

Physicist,
Queen Elizabeth Hospital,
Hong Kong China

Day 2 3 September 2023, Sunday 1530 - 1650

The amount of radiation dose applying onto our patient, especially on children, had always been with high concern among the medical field. For diagnostic radiology, the establishment of diagnostic reference level (DRL) could sure be a useful tool for dose monitoring and optimization purpose.

This presentation shared the experience in establishing a local diagnostic reference level in the Hong Kong Children Hospital and demonstrating the benefits to perform short term dose review apart from an annual basis.

The use of Diagnostic reference level curve had aided to overcome the common challenge of insufficient case number for establishing pediatric DRL. With different patient grouping method, different DRL curve results may have been observed.

Throughout the path of DRL application, dose optimization would be in place either in a regular basis or when a new practice had been established, which sometimes it just required a few simple clicks to reduce the dose.



Abstract

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Quality and Safety in Paediatric Radiology High rate of wrong diagnosis in children, what can be done



Day 2 3 September 2023, Sunday 1530 - 1650

Prof. Stephanie FRANCHI-ABELLA

*Head,
Department of Pediatric Radiology,
Bicêtre Hospital,
France*

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Abstract

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Quality and Safety in Paediatric Radiology Practical aspects of MR safety



Dr. Timothy CAIN

*Senior Medical Specialist Radiologist Medical Imaging,
Clinical Leader MR PET,
The Royal Children's Hospital Melbourne,
Australia*

Day 2 3 September 2023, Sunday 1530 - 1650



Proffered Oral Paper Presentations

Paper Number	Paper Title
6	<p>MRI assessment of pancreatic steatosis in obese chinese adolescents with non-alcoholic fatty liver disease: correlation with beta-cell dysfunction and metabolic syndrome</p> <p><i>Dr. Yee Man Catherine Young, Dr. Chileka Chiyanika, Dr. Fung Ying Dorothy Chan, Dr. Ki Wang, Prof. Chiu Wing Winnie Chu</i></p>
20	<p>Predicting response to initial chemotherapy in pediatric lymphoma using a semi quantitative CECT-based abdomino-thoracic score: a pilot prospective observational study.</p> <p><i>Dr. Ishan Kumar, Dr. Shashank Sonker, Dr. Priyanka Aggarwal, Dr. Ashish Verma, Dr. Ram Shukla, Dr. Vineeta Gupta</i></p>
22	<p>Reduced hippocampal subfield volume is associated with ventricular septal defect size in preschool children with tetralogy of Fallot</p> <p><i>Dr. Yuting Liu, Dr. Jingjing Zhong, PHD Ming Yang</i></p>
40	<p>Development of a deep learning model to identify pediatric orbit fractures in radiographs</p> <p><i>Dr. Saelin Oh, Dr. Bo-Kyung Je, Dr. Gayoung Choi, PhD Yong won Cho</i></p>
41	<p>Ultrasound guided hydrostatic reduction of paediatric intussusception: single centre experience at a tertiary care centre</p> <p><i>Dr. Prasanna Karpaga Kumaravel, Dr. Abirami Krithiga Jayakumar</i></p>
42	<p>Prognostic value of POST-Treatment Extent of Tumor (POSTTEXT) system in patients with hepatoblastoma</p> <p><i>Prof. Hee Mang Yoon, Dr. Hana Jeong, Prof. Pyeong Hwa Kim, Prof. Ah Young Jung, Prof. Jin Seong Lee, Prof. Young Ah Cho</i></p>
47	<p>Angiographic characteristics and transcatheter arterial embolization therapy in kaposiform hemangioendothelioma</p> <p><i>Prof. Xiaoyun Tan, Dr. Zhenyin Liu, Dr. Jiejun Xia, Dr. Kunshan Chen, Prof. Jing Zhang</i></p>
48	<p>The utility of Diffuse-Weighted Imaging (DWI) visual assessment and Apparent Diffusion Coefficient value measurement (ADC) in predicting tumor grade of intracranial gliomas: a retrospective study</p> <p><i>Dr. Gerard Viterbo, Dr. Danlen Masangya</i></p>
49	<p>Foam sclerotherapy for venous malformations in children: a safe and effective treatment option</p> <p><i>Prof. Xiaoyun Tan, Dr. Zheyin Liu, Dr. Jiejun Xia, Dr. Kunshan Chen, Dr. Zijun Zhou, Dr. Yiqun Guo</i></p>
59	<p>Detection of myocardial fat infiltration in Duchenne muscular dystrophy boys: assessed by threshold segmentation method based on cardiac magnetic resonance native T1 mapping</p> <p><i>Dr. Xu Huayan, Dr. Ke Xu, Prof. Xiaoyue Zhou, Prof. Yanglei Wu</i></p>



Proffered Oral Paper Presentations

- 60 A prospective cohort study of Nusinersen in the treatment of spinal muscular atrophy in children with types 2 and 3 on quantitative muscle MRI
Ms. Yuang Huang, Ms. Yingyi Hu, Dr. Zhiyong Li
- 63 MRI vessel wall imaging in paediatric intracranial vasculopathies
Dr. Long Hin Sin, Dr. Wai Tat Victor Chan, Dr. Yat Sing Philip Lee, Dr. Hin Yue Lau, Dr. Chi Wai Siu
- 67 Left atrial function in the postoperative right-sided malformations of congenital heart diseases assessed by CMR
Ms. Yanyan Ma, Prof. Yumin Zhong
- 73 Evaluation of glymphatic system activity by diffusion tensor image analysis along the perivascular space index in rolandic epilepsy
Dr. Lu Gao, Dr. Xianjun Li, Dr. Na Zhang, Prof. Jian Yang
- 85 Feasibility of portal vein flow quantitation in pediatric patients using 4D MRI
Dr. Jesse Courtier, Dr. Parmede Vakhil, Dr. Tammy Kim, Dr. Emily Perito, , Dr. Rachelle Durand
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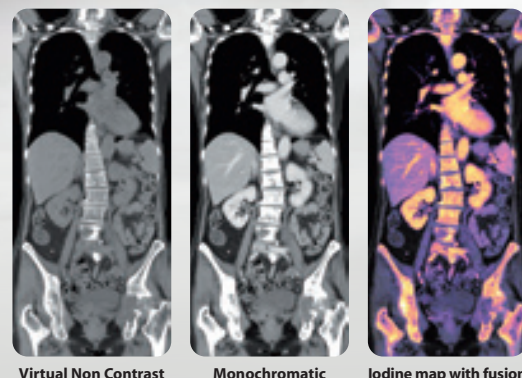
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