

The 49th Annual Meeting of the Japanese Society of Pediatric Surgeons

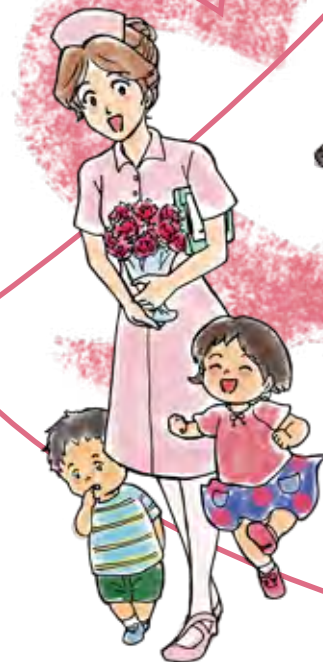
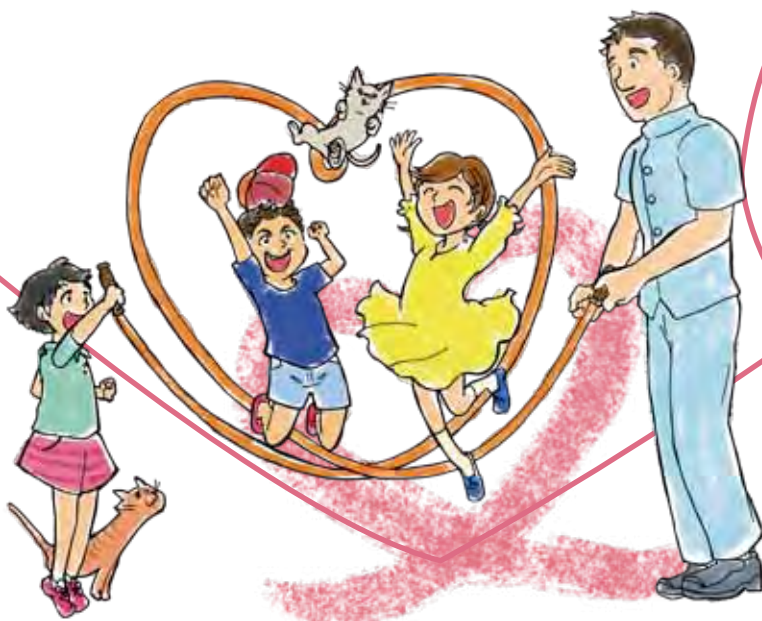
May 14 - 16, 2012

[HTTP://jsps2012.umin.jp](http://jsps2012.umin.jp)



Annex Hall of PACIFICO YOKOHAMA, Japan
Chairperson : Shigeru Ueno M.D., Ph.D.

Professor and Chief Department of Pediatric Surgery,
Tokai University School of Medicine



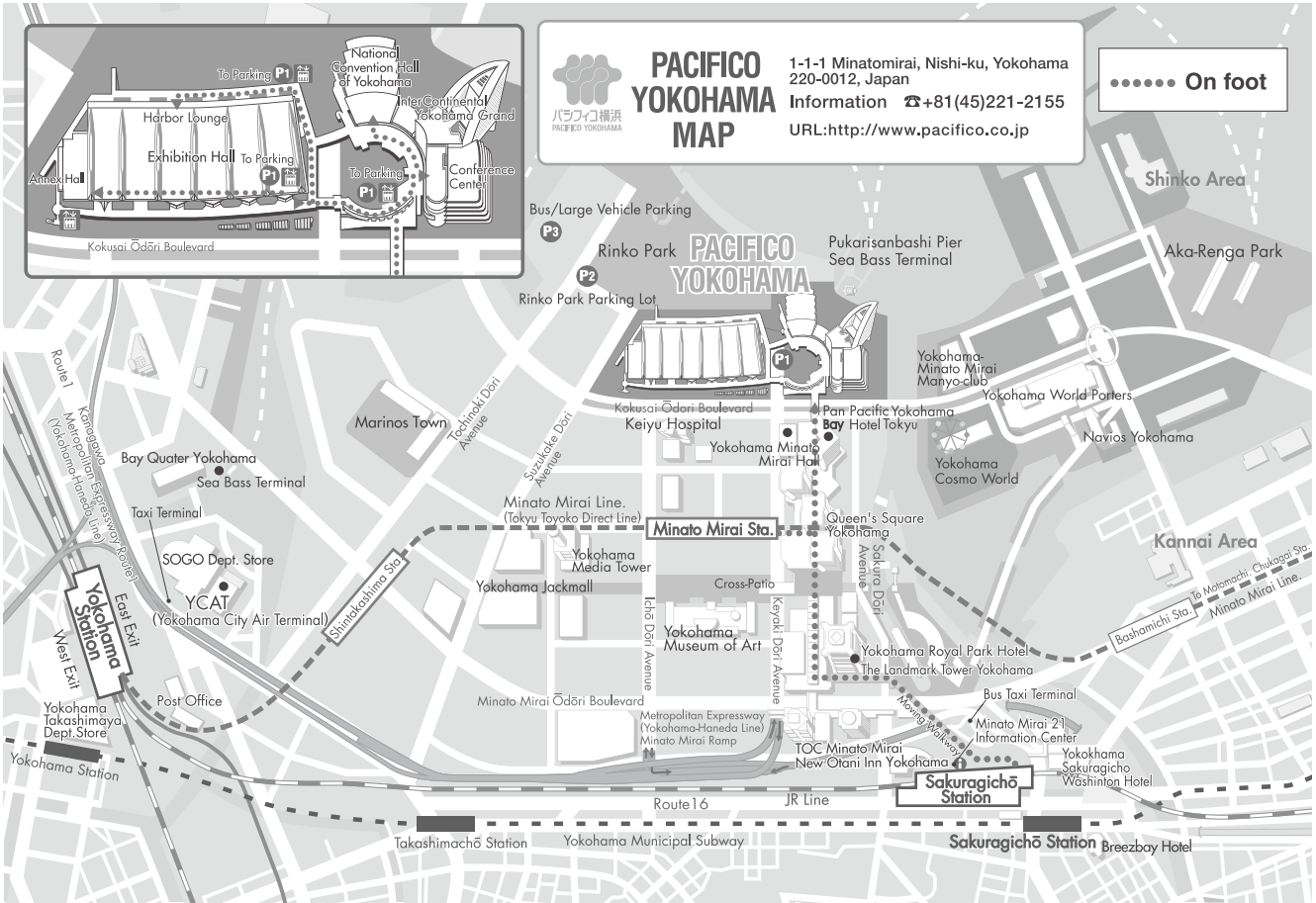
Office

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Maps and Transportation




PACIFICO YOKOHAMA MAP
 1-1-1 Minatomirai, Nishi-ku, Yokohama 220-0012, Japan
 Information ☎+81(45)221-2155
 URL: <http://www.pacifico.co.jp>

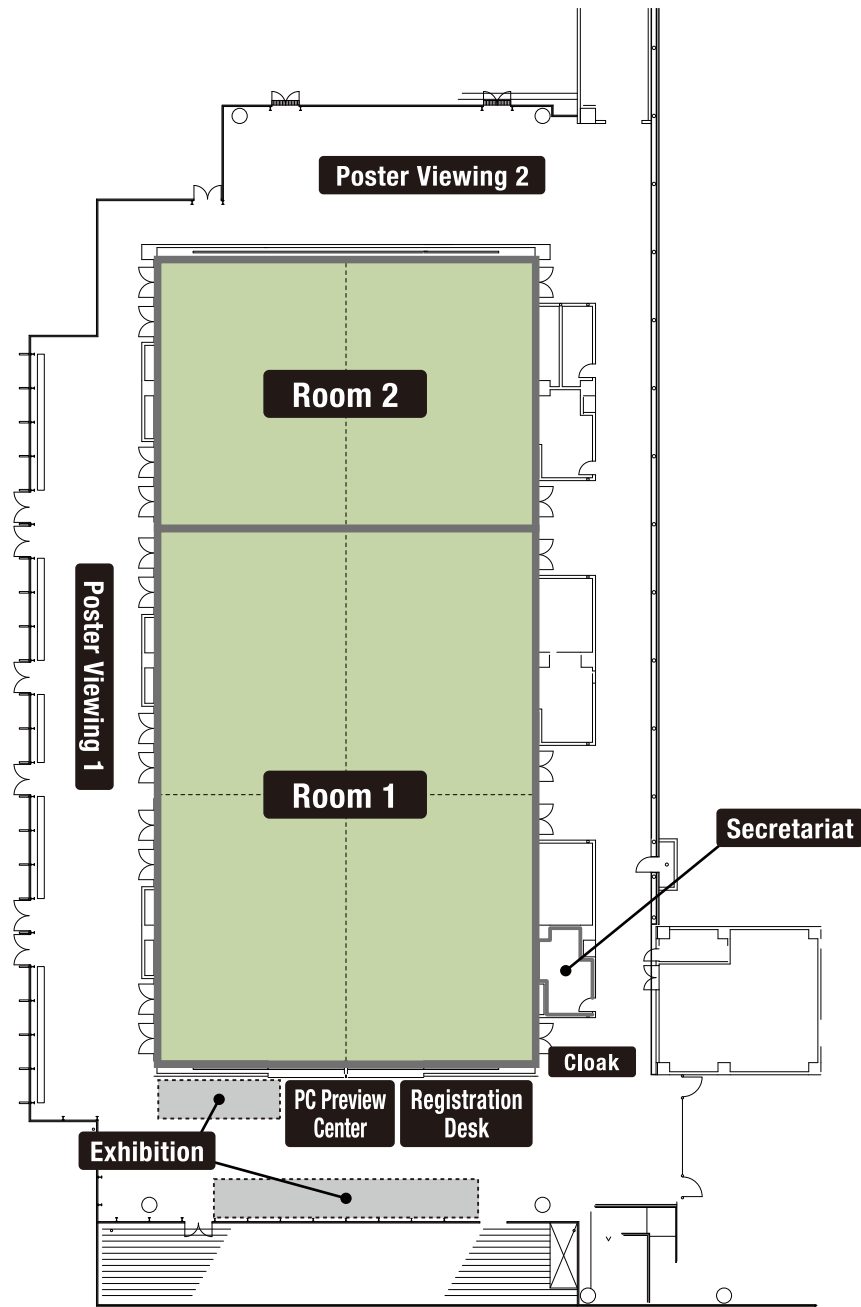
 On foot

How to get to PACIFICO Yokohama

By Air	Haneda Airport	Airport Limousine Bus (35min. for PACIFICO YOKOHAMA)			35min.	
		Airport Limousine Bus	30min.	Yokohama Station YCAT Yokohama City Air Terminal		
	Narita Airport	Keikyu Line	24min.		by Taxi	7min.
		Airport Limousine Bus (120min. for PACIFICO YOKOHAMA)	90min.		Minato Mirai Line	3min.
By Train	Shibuya Station	Tokyu Toyoko Line : Limited Express (Direct link to Minato Mirai Line)	30min.		Minato Mirai Station	on foot 3min.
		JR Tokaido Line	25min.			
	Shin Yokohama Station	JR Yokohama Line Kikuna Station Tokyu Toyoko Line	3min.			
		JR Yokohama Line		JR Keihin-Tohoku Line	3min.	on foot 12min.
		Yokohama Subway	15min.	Sakuragicho Station	by Bus 7min. by Taxi 5min.	
By Car	[From Tokyo]	Toward Yokohama Park, Kanagawa Route K-1		Minato Mirai Exit		
	Metropolitan Expressway	Toward Yokohama (via Bay Bridge), Bay Shore Route B ▶ K-1			3min.	
	[From Kansai or Chubu]	Hodogaya Bypass 15min. ▶ Kariba IC ▶ Toward Yokohama K-1 Metropolitan Expressway 10min.				

Please visit our website www.pacifico.co.jp for parking information.

Venue Floor Maps



Program at a Glance

Monday, May 14			Tues
Room1	Room2	Posters	Room1
8:00			
Opening Remarks		Mounting	General Meeting
Special Symposium Care of children during disasters *English Presentation Included	Requested Theme Session 4 Oncology 1		International Session 2 Hepatobiliary System, Transplantation
	Requested Theme Session 5 Oncology 2		International Session 3 Anorectum, Urogenital System
10:00	Requested Theme Session 6 Oncology 3		
Invited Guest Lecture David Tuggle		Poster Viewing	
Requested Theme Session 1 Trauma care	Requested Theme Session 7 Basic Research 1		Special Lecture 1 Achieving a Dream Yasuhiro Yamashita, Olympic Gold medalist
International Session 1 Neonate Gastrointestinal Tract	Requested Theme Session 8 Basic Research 2		
	Requested Theme Session 9 Basic Research 3		Luncheon Seminar 3
Luncheon Seminar 1	Luncheon Seminar 2		
13:00			Requested Theme Session 10 Treatment of VU Reflux
Congress Chair Lecture Shigeru Ueno			Invited Guest Lecture Prem Puri
14:00	Requested Theme Session 2 Common Surgical Disease 1	Oral Presentation 1 Lessons from Japan Quake	Requested Theme Session 11 Urological Problems
Requested Theme Session 3 QOL-oriented Care	Oral Presentation 2 Disastar and Trauma Care		
15:00	Workshop Beyond Surgery (QOL-oriented management)	Oral Presentation 3 Oncology	Panel Discussion Carry-Overed Patients
	Oral Presentation 4 Computer & Pediatric Surgery		
16:00		International Poster Session 1	
		International Poster Session 2	
17:00	Satellite Seminar For children with difficulty in bowel and urinary function	Poster Session 1~16	
18:00			Ethics and Safety Management Seminar

Exhibition at Foyer Opening Hours:

Monday May 14 08:00 to 17:50
 Tuesday May 15 08:00 to 17:50
 Wednesday May 16 08:00 to 17:20

day, May 15

Room2	Posters
	Mounting
Requested Theme Session 12 Advanced Cardio-respiratory Management 1	
Requested Theme Session 13 Advanced Cardio-respiratory Management 2	Poster Viewing
Oral Presentation 5 Diaphragmatic Hernia	
Luncheon Seminar 4	
Oral Presentation 6 Pectus Excavatum	
Oral Presentation 7 Esophagus	
Oral Presentation 8 Immunology	
Oral Presentation 9 Intestine	
Oral Presentation 10 Hirschsprung's D	
Oral Presentation 11 Anorectum	
	International Poster Session 4
	Poster Session 17~32

Wednesday, May 16

Room1	Room2	Posters
		Mounting
International Session 4 Oncology and Others	Oral Presentation 12 Hepatobiliary System 1	
Educational Lecture Prem Puri	Oral Presentation 13 Hepatobiliary System 2	
Invited Guest Lecture David Sigalet		
Symposium Present and future of organ transplantation in Japanese children	Oral Presentation 14 Urogenital System	
	Requested Theme Session 15 Female Pediatric Surgeons	
	Requested Theme Session 16 Patient Safety	
Special Lecture Future of Human Interface Kazumi Komiya		
Luncheon Seminar 5	Chinese Herbal Medicine Seminar	Poster Viewing
Requested Theme Session 14 Common Surgical Disease 2	Video Session 1 Urology and Others	
Keynote Lecture David Tuggle		
Workshop Surgical Education	Video Session 2 Esophagus / Lung	
	Video Session 3 Diaphragm	
	Video Session 4 Liver / Abdominal Wall	
	Video Session 5 Rectum / Pelvis	Poster Session 33~50
Closing Remarks		

Invited Guest Speaker

Prem Puri, MS, FRCS, FRCS (ED), FACS, FAAP (Hon.)

National Children's Research Centre, Dublin
School of Medicine and Medical Science and Conway Institute of
Biomolecular and Biomedical Research, University College Dublin,
Dublin, Ireland



Invited Guest Lecture

Management of Vesicoureteral Reflux: Past, Present and Future

Primary Vesicoureteral Reflux (VUR) is the most common congenital urological abnormality in children, occurring in 1-2% of pediatric population and in 30-40% of children presenting with a urinary tract infection (UTI). The association of VUR, febrile UTI and renal parenchymal damage is well recognised and reflux nephropathy is a major cause of childhood hypertension and chronic renal failure. The various treatment options currently available in the management of VUR are: (1) Long-term antibiotic prophylaxis; (2) Open Surgical Treatment; (3) Observation or intermittent therapy with management of bladder/bowel dysfunction and treatment of UTI as they occur; (4) Minimally Invasive Endoscopic Treatment.

This lecture is intended to provide paediatric surgeons and paediatric urologist our current understanding and treatment of VUR as well as future opportunities in the management of the child with VUR.

Educational Lecture

How to Prepare a Manuscript for Publication

The researchers communicate their results and help accumulate knowledge through conference papers, online journals and print journals. When writing a manuscript, the goal is to inform the readers why the investigation was carried out, what was investigated, how the investigation was conducted, what were the results and what does it mean. This lecture describes in detail the process of writing a paper from conception through to publication, with special emphasis on common mistakes in submitted manuscripts and research misconduct.

Profile

Professor Prem Puri is the Newman Clinical Research Professor at the University College Dublin School of Medicine and Medical Science, and President of the National Children's Research Centre at Our Lady's Children's Hospital. He is currently the President of the World Federation of Associations of Paediatric Surgeons (WOFAPS) FOUNDATION. He was Past President of the World Federation of Associations of Pediatric Surgeons (WOFAPS), and Past President of the European Paediatric Surgeons Association (EUPSA). He is Editor-in-Chief of Paediatric Surgery International, and also on the Editorial Board of several other journals. He is a member of the Health Research Board of Ireland.

Professor Puri is Honorary Fellow of a number of prestigious medical and scientific societies, including the American Surgical Association (ASA), American Academy of Paediatrics, American Paediatric Surgical Association, Japanese Association of Paediatric Surgeons, and also Argentinean, Austrian, Canadian, Czech, Croatian, Cuban, Indian and South African and Ukrainian paediatric surgical associations.

Professor Puri is known internationally for his research into underlying mechanisms causing birth defects, and innovative treatments, which have benefited children all over the world. He is a multi award-winning researcher whose previous awards include People of the Year Award in Ireland and the prestigious Denis Browne Gold Medal by the British Association of Paediatric Surgeons for outstanding contribution to paediatric surgery. He has been a visiting professor to many leading universities all over the world, and invited speaker to numerous international scientific meetings. He has published 10 books, 127 chapters in textbooks and over 500 articles in peer-reviewed journals.

Invited Guest Speaker

David W. Tuggle, M.D. FACS, FAAP, FCCM

Paula Milburn Miller/Childrens Medical Research Institute Chair in Pediatric Surgery,
Chief, Section of Pediatric Surgery, Department of Surgery
Pediatric Surgery Residency Program Director
University of Oklahoma College of Medicine, Oklahoma, USA



Invited Guest Lecture

Pediatric Mass Casualty Management in the Central US —Man Made and Natural Events

After the events of 9/11/2001 the United States experienced a rush of self-examination concerning the nation's preparation for mass casualties. The majority of consensus committees and publications focused primarily on adult mass casualty management. Nuclear, biologic, and chemical attacks received a large amount of attention. However, natural disasters have continued to provide the vast majority of opportunities for study, research, and improvement. In an effort to focus on the care of children, the American Academy of Pediatrics, the American College of Surgeons, and the National Commission on Children and Disasters have all contributed to the current state of preparations for disasters and mass casualties in the pediatric population. Current topics to improve pediatric care during disasters includes emphasizing family reunification, appropriate maintenance of equipment and supplies suitable for children at individual hospitals, and the long term consequences of the disaster environment including treating the consequences of post-traumatic stress disorder in affected children. Regular drills for practicing our response to disasters and mass casualties for all hospitals in the nation are encouraged, and in some cases required. Regional and national authorities have requested that every disaster drill include children as 20% of the simulated casualties. As we progress, hospitals in a wide geographic region are practicing drills together. On April 28, 2011 11 states in the central part of the USA participated in an earthquake drill involving millions of participants. This is called a tier 1, National Level Exercise (NLE). The next NLE is scheduled for February 7, 2012. A nation's response to disaster is a never ending cycle of education and preparation.

Keynote Lecture

Evolving Techniques in Pediatric Surgical Education

Pediatric Surgeons in the United States are still somewhat in short supply. This is due to the length of time training is required to become eligible for board certification, and the relative lack of training programs. The single most important recent change in pediatric surgical training is the limitation of work hours, to 80 hours a week. The typical applicant for pediatric surgery has finished four to six years of training but has not completed training in general surgery. The program directors in pediatric surgery still prefer to educate surgeons who are completely trained in adult general surgery, rather than to shorten the training period. In June of 2011 a general surgery resident in the USA finished 5 years of training with an average of 966 operations. In June of 2011 a pediatric surgery resident in the US finished 2 years of training with an average of 1175 operations. Despite this large experience, there are gaps in training for conditions such as biliary atresia/choledochal cyst excision (10% deficient), spleen operations (15% deficient) and trauma management (24% deficient). There is a strong emphasis on simulation training in general surgery and this is extending to pediatric surgery. We currently have a 1st year basic minimally invasive surgery course and an advanced (2nd year) minimally invasive course. Most residents attend a colorectal course emphasizing repair of imperforate anus. At the University of Oklahoma we are having our residents attend Advanced Trauma Life Support and the rare exposure course called ASSET sponsored by the American College of Surgeons. The ASSET course uses human cadavers to teach surgical exposure of anatomic structures that when injured may pose a threat to life or limb. Going forward, simulation surgery will be emphasized for rare lesions. There is an initiative by the program directors in North America in the early stages to require a minimum experience with rare lesions, including mentoring after completion of a formal residency in pediatric surgery, prior to completing board certification in pediatric surgery. This is a continuing effort to have each trained pediatric surgeon to have performed a minimum number of operations in each category of important and uncommon procedures, to standardize their overall training. Without evidenced based confirmation that such a novel approach will work, the program directors in pediatric surgery in the US are in hopes of providing a template for training other specialties in surgery.

Profile

Dr. David Tuggle is the Paula Milburn Miller Chair in Pediatric Surgery, the Chief of Pediatric Surgery, and the Vice-Chairman of the Department of Surgery at the University of Oklahoma Health Science Center in Oklahoma City. Dr. Tuggle completed his General Surgery training at the University of Texas-Southwestern Medical School in Dallas, Tx, and his Pediatric Surgery training at the Children's Hospital of Oklahoma. He is certified by the American Board of Surgery in General Surgery, Pediatric Surgery, and Surgical Critical Care. He started the ECMO program at the Children's Hospital of Oklahoma and was the first Trauma Medical Director for the adult and paediatric Level I trauma center in Oklahoma City. Dr. Tuggle has been the Program Director for the Pediatric Surgery training program in Oklahoma City since 1995. He is active in the American College of Surgeons Verification Review process for trauma centers, the American Board of Surgery qualification and certification process and in surgical education.

Invited Guest Speaker

David L. Sigalet, MD., MSc, PhD, FRCSC, FACS

Department of Pediatric General Surgery
Alberta Children's Hospital, Calgary, Canada



Invited Guest Lecture

Treatment of Infants with Intestinal Failure: From Survive to Thrive

This talk will review the effects of combining a multi-disciplinary team, focused on the care of patients with intestinal failure and short bowel syndrome, on the outcomes. We will begin by reviewing the background causes of intestinal failure, the physiology of intestinal adaptation and the pathophysiology of Parenteral Nutrition Associated Liver Disease (PNALD). We will then discuss the rationale and timing for the use of a standardized feeding protocol, lipid reduction and fish-oil based lipid emulsion, rotating antibiotics, and the STEP procedure; and the results of using such a protocol in our last 54 patients.

We will then touch on the development of newer lipid preparations specific for infants with IF such as SMOF, and the use of combined intralip/omegevan protocols. We will finish with a discussion of our latest protocol using Glucagon-like Peptide 2 (GLP-2) as a specific therapy for infants with IF, with the goal of making the adaptation process occur more quickly, and so shortening the time they require PN.

Profile

Dr. David Sigalet was born and grew up in the mountains of British Columbia, Canada. He completed his undergraduate and medical school training at the University of British Columbia in Vancouver. It was here that he first became interested in Pediatric General Surgery. He completed his residency in adult General Surgery, at the University of Alberta, Edmonton. During this time, he developed an interest in short bowel syndrome, which has been the focus of his research activities since. He completed a PhD in Experimental Surgery, studying nutrient absorption after intestinal transplantation, under the supervision of Dr Norm Kneteman at the University of Alberta. He completed his subspecialty training in Pediatric General Surgery at McGill, at the Montreal Children's Hospital under the supervision of Dr JM Laberge. During this period, he was part of the Pediatric Liver Transplant team, and developed expertise in reduced size liver transplantation.

He began his career at the University of Alberta, with a combined Pediatric General Surgery and Transplantation practice. He also continued with his labresearch, studying the potential of intestinal transplantation as a therapy for SBS in children. He was recruited to Children's Mercy Hospital in Kansas City to develop a Pediatric Liver and Intestinal Transplant program. After several years in Kansas, he returned to Canada, to the Alberta Children's Hospital in Calgary. This also prompted a shift in research focus, from intestinal transplantation, to his present interest in understanding the factors which regulate intestinal adaptation, with the goal of maximizing the

function of the patient's residual bowel. This has led his team to examine the role of the newly described gut hormone, Glucagon-Like Peptide 2 in controlling intestinal function and growth in the human neonate. This is now in being studied in infants as a phase 1-2 trial in which Dr Sigalet is the principle investigator. An unexpected observation is that GLP-2 is a potent anti-inflammatory agent in the gut; this is now being studied as a potential therapy for Crohn's disease by Dr Sigalet's lab group. This research is supported by funding from the Alberta Children's Hospital Research Chair in Pediatric Surgery and the Crohn's and Colitis Foundation of Canada.

Clinically, he has initiated the program for minimally invasive repair of chest wall defects at the Alberta Children's Hospital (the Nuss procedure]and the Calgary Protocol for bracing), which is now the largest registry of such patients in Canada. He initiated the provincial program for the treatment of patients with intestinal failure (CHIRP), and the introduction of the Serial Transverse Enteroplasty (STEP) procedure for these patients. This clinical and research work has led to the publication of over 100 peer reviewed abstracts, multiple book chapters
He has developed the Pediatric General Surgical Residency program at the University of Calgary, and has recently retired as Program Director. He is presently the Associate Director of the Department of Surgery of the University of Calgary, and holds the ACH Professorship in Pediatric Surgical Research. He is Chair of the Royal College Exam Board in Pediatric General Surgery. He is Vice President of the World Federation of Associations of Pediatric Surgeons (WOFAPS). When he is not operating or researching, he continues to enjoy skiing or scuba diving, with his wife, and 4 children.

Program of the 49th Annual Meeting of Japanese Society of Pediatric Surgeons

(May 14, Monday)

Room1 (Annex Hall F201·202·203·204)

AM

8:20~8:30

Opening Remarks

8:30~10:00

Special Symposium

Care of Children during disasters

Moderators: Hiroshi Matsufuji

Masaki Nio

**SS-01 Pakistan Earthquake, October 8, 2005 – Experience of 10 Bangladeshi
Commonwealth Volunteer Doctors.**

Dept. of Pediatric Surgery

Dhaka Medical College & Hospital, Bangladesh

Abdul Hanif

SS-02~06 Japanese Presentations

10:00~10:30

Invited Guest Lecture 1

Moderators: Hiroshi Matsufuji

Masaki Nio

**Pediatric mass casualty management in the Central US- Man Made and
Natural Events**

Chief of Pediatric Surgery

University of Oklahoma College of Medicine, Oklahoma, USA

David Tuggle

10:30~11:00

Requested Theme Session 1

Trauma care

Moderator: Takeo Yonekura

OS1-01~04 Japanese Presentations

11:00~11:50

International Session 1

Neonate, Gastrointestinal Tract

Moderators: Akio Kubota

Hisayoshi Kawahara

- IS1-01 Neonatal Surgery: Demand and Survival Both are Increasing: Ten Years
Experience in Dhaka Medical College Hospital, Bangladesh
Dept. of Pediatric Surgery
Dhaka Medical College & Hospital, Bangladesh
Abdul Hanif
- IS1-02 Delayed Primary Anastomosis for Long-Gap Esophageal Atresia: A
Meta-Analysis of Complications and Long-Term Outcome
National Children's Research Centre
Our Lady's Children's Hospital, Ireland
Florian Friedmacher
- IS1-03 Laparoscopic gastropexy using "Funada-kit" comparing with our conventional
Lap-PEG
Dept. of Pediatric General and Urogenital Surgery
Juntendo Univ. School of Medicine, Japan
Toshiaki Takahashi
- IS1-04 Esophageal and Gastrointestinal Tract Foreign Bodies In Children
Dept. of Pediatric Surgery
Northwestern St. Petersburg Medical University, Russia
Nadezda S Bondarenko
- IS1-05 Duplication of the Common Bile Duct with Abscess Formation in a
Very-Low-Birth Weight Infant
Department of Gastroenterological Surgery I
Hokkaido University Graduate School of Medicine, Japan
Tadao Okada
- IS1-06 Outpatient laparoscopic interval appendectomy after perforated appendicitis
Division of Pediatric Surgery
Kaohsiung Chang Gung Memorial Hospital of the CGMF, Taiwan
Shin-Yi Lee
- IS1-07 Absent Smooth Muscle Actin Immunoreactivity of the Small Bowel Muscularis
Propria Circular Layer in MMIHS
Department of Surgery
Kitasato University, School of Medicine, Japan
Hajime Takayasu

12:00~13:00

Luncheon Seminar 1

PM

13:00~13:30

Congress Chair Lecture

Moderator : Tadashi Iwanaka

A notion of difficult bowel movement in children

In Japanese

Shigeru Ueno

13:30~14:00

Requested Theme Session 2

Common Surgical Disease 1

Moderator : Takuo Noda

OS2-01~04 Japanese Presentations

14:00~14:30

Requested Theme Session 3

QOL- oriented care

Moderator : Kazutoshi Miyamoto

OS3-01~04 Japanese Presentations

14:30~16:00

Workshop 1

Beyond Surgery (QOL-oriented management)

Moderators: Akira Toki

Minoru Yagi

WS1-01~10 Japanese Presentations

Room2 (Annex Hall F205・206)

AM

8:30~9:00

Requested Theme Session 4

Oncology 1

Moderators : Hitoshi Ikeda

OS4-01~04 Japanese Presentations

9:00~9:30

Requested Theme Session 5

Oncology 2

Moderator: Tugumichi Koshinaga

OS5-01~04 Japanese Presentations

9:30~10:00

Requested Theme Session 6

Oncology 3

Moderator : Tatsuro Tajiri

OS6-01~04 Japanese Presentations

10:30~11:00

Requested Theme Session 7

Basic Research 1

Moderator: Hiroaki Komuro

OS7-01~04 Japanese Presentations

11:00~11:30

Requested Theme Session 8

Basic Research 2

Moderators: Eisou Hiyama

OS8-01~04 Japanese Presentations

11:30~12:00

Requested Theme Session 9

Basic Research 3

Moderator: Hideo Yoshida

OS9-01~04 Japanese Presentations

12:00~13:00

Luncheon Seminar 2

PM

13:30~14:10

Oral Presentation 1

Lessons from Japan Quake

Moderator: Takashi Hashimoto

O1-01~05 Japanese Presentations

14:10~14:40

Oral Presentation 2

Disaster and Trauma Care

Moderator: Takuya Kosumi

O2-01~04 Japanese Presentations

14:40~15:15

Oral Presentation 3

Oncology

Moderator: Mitsuhiro Yoneda

03-01~05 Japanese Presentations

15:15~15:50

Oral Presentation 4

Computer and Pediatric Surgery

Moderator: Jun Iwai

04-01~05 Japanese Presentations

16:00~18:30

Satellite Seminar For children with difficulty in bowel and urinary function

Posters

PM

16:00~16:30

International Poster Session 1 Head and Thorax

Moderator: Tadao Okasa

ISP1-01 Low income as a risk factor for traumatic brain injury in pediatric population
in Taiwan

Department of Anesthesiology
Taipei Medical University Hospital, Taiwan
Chien-Chang Liao

ISP1-02 Video-Assisted Thoracoscopic lobectomy for Bronchiectasis: A Case Report

Dept. of Pediatric General and Urogenital Surgery
Juntendo Univ. School of Medicine, Japan
Toshiaki Takahashi

ISP1-03 Clinical Factors Predicting Postoperative Chylothorax of Congenital
Esophageal Atresia

Department of Gastroenterological Surgery I
Hokkaido University Graduate School of Medicine, Japan
Hisayuki Miyagi

ISP1-04 Thoracoabdominal incision in pediatric surgery

Department of Pediatric General and Urogenital Surgery
Juntendo University School of Medicine, Japan
Hiroyuki Koga

16:30~17:00

International Poster Session 2 Hepatobiliary System, Transplantation

Moderator: Kiyoshi Tanaka

ISP2-01 Factors Predicting Occurrence of Symptoms in Prenatally Diagnosed
Choledochal Cyst Patients

Department of Gastroenterological Surgery I
Hokkaido University Graduate School of Medicine, Japan

Tadao Okada

ISP2-02 Positive Hepatic Fibrosis in Symptomatic Patients with Prenatally Diagnosed
Choledochal Cyst

Department of Gastroenterological Surgery I
Hokkaido University Graduate School of Medicine, Japan

Tadao Okada

ISP2-03 Extrahepatic Choledochal Cystojejunostomy for Severe Intrahepatic
Involvement :IV-A CBD

Department of Gastroenterological Surgery I
Hokkaido University Graduate School of Medicine, Japan

Hisayuki Miyagi

ISP2-04 Alopecia in children following living related liver transplantation

Department of Pediatric Surgery
Reproductive and Developmental Medicine, Graduate School of Medical Sciences,
Kyushu University, Japan

Fatima S Alatas

17:00~17:30

Poster Session 1

Present and Future of Organ Transplantation in Japanese Children

Moderator: Shinya Okamoto

P1-01~05 Japanese Presentations

16:00~16:40

Poster Session 2 Trauma Care

Moderator: Etsuji Ukiyama

P2-01~06 Japanese Presentations

16:40~17:10

Poster Session 3

Common Surgical Disease 1

Moderator: Jun Yanagihara

P3-01~05 Japanese Presentations

17:10~17:50

Poster Session 4

Common Surgical Disease 2

Moderator: Hiroyuki Noguchi

P4-01~06 Japanese Presentations

16:00~16:30

Poster Session 5

Carry-Over Patients 1

Moderator: Miwako Nakano

P5-01~05 Japanese Presentations

16:30~17:00

Poster Session 6

Carry-over Patients 2

Moderator: Norio Suzuki

P6-01~05 Japanese Presentations

17:00~17:30

Poster Session 7

Carry-over Patients 3

Moderator: Kazuhiro Hagane

P7-01~05 Japanese Presentations

16:00~16:30

Poster Session 8

QOL-Oriented Care

Moderator: Takehito Oshio

P8-01~06 Japanese Presentations

16:30~17:10

Poster Session 9

Tumor 1

Moderator: Munechika Wakisaka

P9-01~06 Japanese Presentations

17:10~17:40

Poster Session 10 Lymphangioma

Moderator: Motoshi Wada

P10-01~05 Japanese Presentations

Poster Session 2

PM

16:00~16:50

Poster Session 11 Abdominal Wall

Moderator: Takashi Shimotake

P11-01~07 Japanese Presentations

16:50~17:30

Poster Session 12 Neck, Thoracic Surgery

Moderator: Hiroaki Yoshino

P12-01~06 Japanese Presentations

16:00~16:40

Poster Session 13 Basic Research 1

Moderator: Yoshiaki Tanaka

P13-01~06 Japanese Presentations

16:40~17:30

Poster Session 14 Basic Research, Oncology

Moderator: Ooue Takaharu

P14-01~07 Japanese Presentations

16:00~16:40

Poster Session 15 Oncology 2

Moderator: Masayuki Obatake

P15-01~06 Japanese Presentations

16:40~17:30

Poster Session 16

Oncology 3

Moderator: Tomoro Hishiki

P16-01~07 Japanese Presentations

Poster Display

PD1-01~29

Program of the 49th Annual Meeting of Japanese Society of Pediatric Surgeons

(May 15, Tuesday)

Room1 (Annex Hall F201·202·203·204)

AM

8:00~8:50

General Meeting

8:50~9:40

International Session 2

Hepatobiliary System, Transplantation

**Moderators: Toshihiro Muraji
 Kenichiro Kaneko**

IS2-01 Duration of symptoms pre-Kasai portoenterostomy, not age at Kasai, is prognostic in biliary atresia

Department of Pediatric General and Urogenital Surgery
Juntendo University School of Medicine, Japan
Momoko Wada

IS2-02 Experience of sequential intestinal transplantation after living-donor liver transplantation

Department of Pediatric Surgery
Graduate School of Medicine, Tohoku University, Japan
Motoshi Wada

IS2-03 Reappraise the effect of redo-Kasai for recurrent jaundice following Kasai operation for biliary atresia in the era of liver transplantation

Dept. of Pediatric Surgery
Chang gung Memorial Hospital, Kaohsiung, Taiwan
Manuel Mikery

IS2-04 The Challenge of Acute Rejection in Small Bowel Transplantation

Department of Pediatric Surgery
Kyoto University Hospital, Japan
Elena Yukie Yoshitoshi

IS2-05 Children undergoing LRLTx for treatment of Inherited-Metabolic Diseases are prone to higher oxidative stress and complement activity.

Pediatric Surgery

Medical Research Department, Egyblood, VACSERA, Egypt

Mohamed H. Hussein

IS2-06 Trans-differentiation capacity into hepatocyte-like cells of stem cells from human exfoliated deciduous teeth

Department of Pediatric Surgery

Reproductive and Developmental Medicine

Graduate School of Medical Sciences, Kyushu University, Japan

Fatima S Alatas

IS2-07 Laparoscopic treatment of choledochal cyst in children; Review of 34 cases.

Department of Pediatric General and Urogenital Surgery

Juntendo University School of Medicine, Japan

Atsuyuki Yamataka

9:40~10:25

Internal Session 3

Anorectum, Urogenital System

Moderators: Atsuyuki Yamataka

Osamu Kimura

IS3-01 Can Early Post Operative Uroflowmetry Replace Routine Calibration In Evaluation Of Hypospadias Repair?

Dept of Pediatric Surgery

Post Graduate Institute of Medical Education and Research, India

Shilpa Sharma

IS3-02 Determinants of sex of rearing in late presenters of 5alpha reductase deficiency in developing society.

New Civil Hospital and Government Medical College

Surat, Gujarat, India

Manish Jain

IS3-03 Trans-Urogenital Sinus approach for Urethroplasty and Vaginoplasty

Dept of Pediatric Surgery

Post Graduate Institute of Medical Education and Research, India

Shilpa Sharma

IS3-04 Kaniz Procedure: Transfistula Anorectoplasty (TFARP) Is a More Convenient Surgical Approach For Correction Of Rectovestibular Fistula (RVF)

Dept. of Pediatric Surgery
Dhaka Medical College & Hospital, Dhaka, Bangladesh
Kaniz Hasina

IS3-05 Modified tubularized incised plate repair for impeding fistula formation in re-do urethroplasty or hypospadias patients with thin urethral plates

Department of Pediatric General and Urogenital Surgery
Juntendo University School of Medicine, Japan
Atsuyuki Yamataka

IS3-06 Bowel and urinary continence after scope-assisted anorectovaginoplasty for female anorectal malformation

Department of Pediatric General and Urogenital Surgery
Juntendo University School of Medicine, Japan
Atsuyuki Yamataka

10:30~12:00

Special Lecture 1
Achieving a Dream

Moderator: Tomoaki Taguchi

Olympic Gold Medalist Yasuhiro Yamashita

12:00~13:00

Luncheon Seminar 3

PM

13:00~13:20

Requested Theme Session 10

Treatment of VU Reflux

Moderator: Takafumi Goto

OS10-01~03 Japanese Presentations

13:20~14:00

Invited Guest Lecture 2

Moderator: Takao Fujimoto

Management of Vesicoureteral Reflux: Past, Present and Future

**Consultant Paediatric Surgeon and President,
National Children's Research Centre, Dublin, Ireland**

Prem Puri

14:00~14:30

Requested Theme Session 11

Urological Problems

Moderator: Yutaka Kanamori

OS11-01~04 Japanese Presentations

14:30~16:00

Panel Discussion

Carry-Overed Patients

Moderators: Tatsuo Kuroda

Eiji Nishijima

PD-01~10 Japanese Presentations

18:00~18:45

Ethics and Safety Management Seminar

Room2 (Annex Hall F205·206)

PM

8:50~9:20

Requested Theme Session 12

Advanced Cardio-respiratory Management 1

Moderator: Kousaku Maeda

OS12-01~04 Japanese Presentations

9:20~9:50

Requested Theme Session 13

Advanced Cardio-respiratory Management 2

Moderator: Shouichiro Kamagata

OS13-01~04 Japanese Presentations

9:50~10:25

Oral Presentations 5

Diaphragmatic Hernia

Moderator: Noriaki Usui

05-01~05 Japanese Presentations

12:00~13:00

Luncheon Seminar 4

PM

13:00~13:30

Oral Presentation 6

Pectus Excavatum

Moderator: Sadashige Uemura

06-01~04 Japanese Presentations

13:30~14:00

Oral Presentation 7

Esophagus

Moderator: Junji Kato

07-01~04 Japanese Presentations

14:00~14:30

Oral Presentation 8

Immuology

Moderator: Keiichi Uchida

08-01~04 Japanese Presentations

14:30~15:00

Oral Presentation 9

Intestine

Moderator: Miyuki Kono

09-01~04 Japanese Presentations

15:00~15:30

Oral Presentation 10

Hirschsprung's Disease

Moderator: Yoshio Watanabe

010-01~04 Japanese Presentations

15:30~16:00

Oral Presentation 11

Anorectum

Moderator: Seiichi Hirobe

O11-01~04 Japanese Presentations

Posters1

PM

16:00~16:30

International Poster Session 3 Gastrointestinal Tract

Moderator: Hiroyuki Kobayashi

ISP3-01 Disaster Preparedness in Bangladesh

Dept. of Pediatric Surgery

Dhaka Medical College & Hospital, Bangladesh

Abdul Hanif

ISP3-02 24 hour esophageal impedance-pH monitoring in pediatric or neurologically impaired patients

Department of Pediatric Surgery

Kagoshima University, Japan

Ryuichi Shimono

ISP3-03 A potential new indicator of postoperative gastrointestinal recovery: Total bilirubin in NG aspirates.

Dept. of Pediatric Surgery

Juntendo Univ. School of Medicine, Japan

Go Miyano

16:30~17:00

International Poster Session4 Oncology and others

Moderator: Yasuharu Ohno

ISP4-01 Laparoscopic Excision of Urachal Remnants in children ~What's indication for it? ~

Department of Pediatric Surgery

St. Marianna University School of Medicine

Yokohama City Seibu Hospital, Japan

Hideaki Sato

ISP4-02 Postnatal management of antenatally-diagnosed ovarian cysts

Division of Pediatric Surgery
St. Marianna University School of Medicine, Kanagawa, Japan
Mariko Koyama

ISP4-03 A virilizing adrenocortical carcinoma in a 2-years-old girl

Department of Pediatric Surgery
Juntendo University Nerima Hospital, Japan
Hiroki Nakamura

ISP4-04 Late recurrence of stage Ia ovarian mucinous cystadenocarcinoma in teenage patients: Case report and review of the literature

Department of Pediatric Surgery
Nihon University School of Medicine, Japan
Takayuki Masuko

17:00~17:50

Poster Session17

Transplantation / Immunology

Moderator: Masato Shinkai

P17-01~7 Japanese Presentations

16:00~16:30

Poster Session18

Lung / Trachea

Moderator: Hirotsugu Terakura

P18-01~5 Japanese Presentations

16:30~17:10

Poster Session19

Advanced Cardiothoracic Surgery1

Moderator: Shigeru Takamizawa

P19-01~5 Japanese Presentations

17:10~17:50

Poster Session 20

Advanced Cardiothoracic Surgery2

Moderator: Michihiro Sugai

P20-01~6 Japanese Presentations

16:00~16:40

Poster Session21 Pulmonary / Lung

Moderator: Tadaharu Okazaki

P21-01~6 Japanese Presentations

16:40~17:10

Poster Session22 Diaphragm / Heart

Moderator: Misako Hirai

P22-01~05 Japanese Presentations

17:10~17:40

Poster Session23 Neonate

Moderator: Norihiko Kitagawa

P23-01~05 Japanese Presentations

16:00~16:30

Poster Session 24 Esophagus1

Moderator: Masahiro Chiba

P24-01~05 Japanese Presentations

16:30~17:10

Poster Session25 Esophagus2

Moderator: Hiroshi Take

P25-01~06 Japanese Presentations

17:10~17:40

Poster Session26 Esophagus3

Moderator: Kazunori Ohama

P26-01~05 Japanese Presentations

s

Posters2

PM

16:00~16:40

Poster Session27

Appendicitis

Moderator: Kazuko Obana

P27-01~06 Japanese Presentations

16:40~17:30

Poster Session28

Ileus / Colon

Moderator: Noritoshi Handa

P28-01~07 Japanese Presentations

16:00~16:40

Poster Session 29

Stomach / Duodenum

Moderator: Kunio Takano

P29-01~06 Japanese Presentations

16:40~17:20

Poster Session30

Abdominal Wall / Others

Moderator: Hirokazu Kawase

P30-01~06 Japanese Presentations

16:00~16:50

Poster Sessions31

Hirschsprung's Disease

Moderator: Satoshi Ieiri

P31-01~07 Japanese Presentations

16:50~17:30

Poster Sessions32

Anorectum

Moderator: Taro Ikeda

P32-01~06 Japanese Presentations

Poster Display

PD2-01~29

Program of the 49th Annual Meeting of Japanese Society of Pediatric Surgeons

(May 16, Wednesday)

Room1 (Annex Hall F201·202·203·204)

AM

8:30~9:10

International Session4

Oncology and others

Moderators: Hiroaki Kitagawa

Yasushi Fuchimoto

IS4-01 Pulmonary artery size as an indication for thoracoscopic repair of congenital diaphragmatic hernia (CDH) in neonates

Department of Pediatric Surgery

Juntendo University Urayasu Hospital, Japan

Tadaharu Okazaki

IS4-02 Downregulation of Pax3 Gene and Myogenic Regulatory Factors in the Cadmium-Induced Omphalocele Chick Model

Department of Pediatric General & Urogenital Surgery

Juntendo University School of Medicine, Japan

Takashi Doi

IS4-03 Non-invasive Acoustic Radiation Force Impulse (ARFI) elastography for assessing the severity of fibrosis in the post-operative patients with biliary atresia

Division of Paediatric Surgery

St. Marianna University School of Medicine, Kanagawa Japan

Hideki Shima

IS4-04 Giant omental lipoblastoma versus liposarcoma: CD34 and CD56 as possible differentiating markers

Dept. of Pediatric General & Urogenital Surgery

Juntendo Univ. School of Medicine, Japan

Go Miyano

IS4-05 Effect of Preoperative Chemotherapy in the Treatment of Advanced Wilms' Tumor - 10 year experience of Dhaka Medical College

Dept. of Pediatric Surgery

Dhaka medical College & Hospital, Dhaka, Bangladesh

Kaniz Hasina

9:10~9:30

Educational Lecture

Moderator: Hiroaki Kitagawa

How to Prepare a Manuscript for Publication

Consultant Paediatric Surgeon and President,
National Children's Research Centre, Dublin, Ireland

Prem Puri

9:30~10:10

Invited Guest Lecture³

Moderator: Yoshinori Hamada

Treatment of Infants with Intestinal Failure: From Survive to Thrive

Professor of Pediatric Surgical Research
Alberta Children's Hospital, University of Calgary, Calgary, Canada

David Sigalet

10:10~11:10

Symposium

Present and future of organ transplantation in Japanese Children

Moderators: Masahiro Fukuzawa

Ken Hoshino

S-01~08 Japanese Presentations

11:20~12:00

Special Lecture²

Moderator: Yasuhide Morikawa

Future of Human Interface

Kazumi Komiya

12:00~13:00

Luncheon Seminar⁵

PM

13:00~13:30

Requested Theme Session¹⁴

Common Surgical Disease²

Moderator: Osamu Segawa

OS14-01~04 Japanese Presentations

13:30~14:00

Keynote Lecture

Moderator: Atsuyuki Yamataka

Evolving Techniques in Pediatric Surgical Education

Chief of Pediatric Surgery

University of Oklahoma College of Medicine, Oklahoma, USA

David Tuggle

14:00~16:00

Workshop2

Surgical Education

Moderators: Masayuki Kubota

Minoru Kuroiwa

WS2-01~13 Japanese Presentations

17:30~17:50

Closing Remarks

Room2 (Annex Hall F205・206)

PM

8:30~9:00

Oral Presentation12

Hepatobiliary System1

Moderator: Hisami Ando

O12-01~04 Japanese Presentations

9:00~9:30

Oral Presentation13

Hepatobiliary System2

Moderator: Tatsuya Suzuki

O13-01~04 Japanese Presentations

10:00~10:30

Oral Presentation14

Urogenital System

Moderator: Toshihiro Yanai

O14-01~04 Japanese Presentations

10:30~11:00

Requested Theme Session15

Female Pediatric Surgeons み

Moderator: Yukihiro Inomata

OS15-01~04 Japanese Presentations

11:00~11:30

Requested Theme Session16

Patient Safety

Moderator: Yuji Nirasawa)

OS16-01~04 Japanese Presentations

12:00~13:00

Chinese Herbal Medicine Seminar

PM

13:00~13:30

Video Session1 Urology and Others

Moderator: Shintaro Amae

V1-01~04 Japanese Presentations

14:00~14:40

Video Session2 Esophagus / Lung

Moderator: Hiroomi Okuyama

V2-01~05 Japanese Presentations

14:40~15:10

Video Session3 Diaphragm

Moderator: Naoto Urushihara

V3-01~04 Japanese Presentations

15:10~15:40

Video Session4 Liver / Abdominal Wall

Moderator: Jouji Yoshizawa

V4-01~04 Japanese Presentations

15:40~16:10

Video Session5 Rectum Pelvis

Moderator: Makoto Yagi

V5-01~04 Japanese Presentations

Posters1

PM

15:30~16:10

Poster Session33 Intestine1

Moderator: Naoki Okuyama

P33-01~06 Japanese Presentations

16:10~16:40

Poster Session34 Intestine2

Moderator: Hiroki Ishibashi

P34-01~05 Japanese Presentations

16:40~17:10

Poster Session35 Anorectum / Constipation

Moderator: Kunio Konuma

P35-01~05 Japanese Presentations

15:30~16:00

Poster Session36 Hernia

Moderator: Masahito Sato

P36-01~5 Japanese Presentations

16:00~16:30

Poster Session37 Umbilical Hernia

Moderator: Gohei Ochi

P37-01~5 Japanese Presentations

16:30~17:00

Poster Session38 Intussusception

Moderator: Kazuhiro Ohtsu

P38-01~5 Japanese Presentations

15:30~16:10

Poster Session39 Female Pediatric Surgeons

Moderator: Kazuo Ishida

P39-01~06 Japanese Presentations

16:10~16:40

Poster Session40 Surgical Education

Moderator: Tatsuru Kaji

P40-01~04 Japanese Presentations

16:40~17:10

Poster Session41 Patient Safety

Moderator: Eiichi Deguchi

P41-01~05 Japanese Presentations

15:30~16:10.

Poster Session42 Gastrointestinal Foreign body / Appendicitis

Moderator: Takeshi Shono

P42-01~06 Japanese Presentations

16:10~16:40

Poster Session43 Appendicitis

Moderator: Kouichi Ohno

P43-01~05 Japanese Presentations

16:40~17:20

Poster Session44 Urology

Moderator: Yuki Ishimaru

P44-01~06 Japanese Presentations

Poster2

PM

15:30~16:20

Poster Session45

GB Stone / Choledochal Cyst1

Moderator: Kiyoshi Sasaki

P45-01~07 Japanese Presentations

16:20~17:00

Poster Session46

GB Stone / Choledochal Cyst2

Moderator: Hiroo Uchida

P46-01~06 Japanese Presentations

15:30~16:20

Poster Session47

Biliary Atresia

Moderator: Fujio Hara

P47-01~07 Japanese Presentations

16:20~16:50

Poster Session48

Solid Tumor

Moderator: Kazuya Ise

P48-01~05 Japanese Presentations

15:30~16:10

Poster Session49

Pancreas / Spleen

Moderator: Toru Arima

P49-01~06 Japanese Presentations

16:10~16:50

Poster Session50

Oncology4

Moderator: Masahiko Sugiyama

P50-01~06 Japanese Presentations

Poster Display

PD3-01~28

SS-01 Pakistan Earthquake, October 8, 2005-Experience of 10 Bangladeshi Commonwealth Volunteer Doctors

Dept. of Pediatric Surgery, Dhaka Medical College & Hospital, Bangladesh

Abdul Hanif

On October 8, 2005 at 8 : 50 : 38 am there was a massive earthquake in the northern part of Pakistan causing death of more than 87,350 people including many children and wounded over 100,000. The magnitude of earthquake was 7.6 at Richter scale. Many students were buried under collapsed school buildings, many people also trapped in their homes and were sleeping after taking 'SEHERI' since it was Ramadan and died and/or injured. It was a huge disaster and Pakistan called for world help along with medical support.

Within days Cuban medical team arrived and later from USA, UK, Japan, Australia, Spain, European countries, Middle East and many others joined to serve the medical relief team along with other rehabilitation programs.

Commonwealth Secretariat, London selected 10 Bangladeshi doctors to volunteered in their medical team for a period of 6-12 weeks in November 2005. The patients were diverse: fractures, head injuries, skin loss, urethral injuries, perineal injury etc. Doctors had to treat these, counseling the patients & also taking care of daily patients including neonatal resuscitation to caesarian section! Language barrier was an issue. This was a great challenge in minus temperature but rewarding experience.

Conclusion: Bangladesh and many countries are in high risk area for earthquake and if any disaster occurs (Allah forgives us), the casualty of highly populated cities would be unthinkable. Are we prepared to handle any such situation? Specialist doctors should be prepared in a coordinated way to provide all sorts of medical service in an emergency situation.

ISI-01 NEONATAL SURGERY: DEMAND AND SURVIVAL BOTH ARE INCREASING: TEN YEARS EXPERIENCE IN DHAKA MEDICAL COLLEGE HOSPITAL, BANGLADESH

Dept. of Pediatric Surgery, Dhaka Medical College & Hospital, Bangladesh

Abdul Hanif, Kaniz Hasina, Huda Shamsul, Ashraf-Ul Huq, Mahbub-Ul Alam, Shahnoor Islam, Tahmina Hossain

Purpose: To achieve the Millennium Development Goal (MDG) 4- a two-thirds reduction in under-five mortality from 1990 to 2015, major reductions are going to be required in neonatal mortality. Congenital anomalies have become the fourth cause of neonatal deaths and most of these are curable. Dhaka Medical College Hospital is the largest public hospital of the country and serving the poor and lower middle class people where surgery and medical facilities are mostly free of cost.

Materials & Methods: This was a retrospective study of 10 years from July 2001 to June 2011. A total of 862 neonates were admitted during this period and it was the 18.61% of total number of 4,632 pediatric surgical admission upto 12 years.

Results: Out of these 862 neonates 82.48% were admitted for Neonatal Intestinal Obstruction (NIO) and omphalocele were 8.46%, ectopia vesicae 2.08%, posterior urethral valves 3.36%, gastroschisis 1.16%, congenital diaphragmatic hernia 2.08%, Tracheo-oesophageal fistula 0.23%, and Conjoint twin 1. The most common cause of NIO was anorectal malformation - 42.57%. Next was Hirschsprung disease and 19.83%. Total 87.94% patients were managed surgically. Out of 862 patients, 82 died, so mortality was 9.51%-before surgery 3.01%, after surgery 6.49%.

Conclusion: Pediatric surgeons by their skill and teamwork greatly improved the neonatal surgical service and contributing significantly in reducing infant mortality rate and to achieve MDG 4. To improve further, neonatal intensive care unit (NICU) as well as support from UNICEF and World Health Organization (WHO) is required. Roll of pediatric surgeons are multidimensional in developing countries.

ISI-02 DELAYED PRIMARY ANASTOMOSIS FOR LONG-GAP ESOPHAGEAL ATRESIA: A META-ANALYSIS OF COMPLICATIONS AND LONG-TERM OUTCOME

National Children's Research Centre, Our Lady's Children's Hospital, Ireland

Florian Friedmacher, Prem Puri

Purpose: Management of newborns with long-gap esophageal atresia (EA) remains a challenge for most pediatric surgeons. High incidences of prematurity and additional congenital anomalies complicate the care of these patients. Since it is known, that spontaneous growth of the esophageal segments occurs without bouginage or stretching, initial gastrostomy followed by delayed primary anastomosis (DPA) has been widely accepted for treatment of long-gap EA. The aim of this meta-analysis was to investigate the complications and long-term outcome in patients with long-gap EA managed by DPA.

Methods: PubMed[®] and EMBASE[®] literature search was performed on articles published between 1981-2011 reporting cases of long-gap EA treated by DPA. Only publications mentioning complications and outcome were included in this meta-analysis.

Results: Forty-four articles presented data on 451 newborns with long-gap EA managed by DPA. 129 (28.5%) of these had additional congenital anomalies. Long-gap EA comprised pure EA ($n=194$; [43.0%]) and EA with tracheoesophageal fistula (TEF) ($n=257$; [57.0%]). At birth, mean initial gap was 3.6 cm (range 1.9-7.0). At a mean age of 11.9 weeks (range 1.5-52.0), the mean preoperative gap was decreased to 1.3 cm (range 0.5-3.5) when DPA was performed. Circular myotomy was performed in 46 (10.2%) patients. Follow-up time was 5.5 years (range 0.5-27.0). 34 (7.5%) patients died. Anastomotic leaks occurred in 62 (13.7%) patients and 25 needed drainage/reoperation. 155 (34.4%) patients developed anastomotic strictures; 129 (28.6%) responded to repeated dilatations while 26 (5.8%) needed resection and reanastomosis. 123 (27.2%) patients developed symptomatic gastroesophageal reflux (GER) and 94 needed fundoplication. Other complications were esophagitis ($n=14$; [3.1%]), recurrent TEF ($n=12$; [2.7%]), aspiration pneumonia ($n=11$; [2.4%]), growth retardation ($n=21$; [4.6%]) and Barrett's metaplasia ($n=$; [0.9%]). 405 (89.8%) patients were able to eat normally without dysphagia. 13 (2.9%) patients needed esophageal replacement.

Conclusion: DPA provides good long-term functional results. However, the high incidence of GER and associated strictures requires early intervention to prevent ongoing feeding problems.

IS1-03 Laparoscopic gastropexy using “Funada-kit” comparing with our conventional Lap-PEG
Dept. of Pediatric General and Urogenital Surgery, Juntendo Univ. School of Medicine, Japan
Toshiaki Takahashi, Go Miyano, Satoko Shiyanagi, Geoffrey J. Lane, Atsuyuki Yamataka

Aim: We report a modification to our laparoscopy-assisted percutaneous endoscopic gastrostomy (Lap-PEG) reported previously and compared the two.

Methods: Since 2011, we have used a double-lumen device, called a Funada kit (TOP corporation, Tokyo, Japan) to suture the anterior gastric wall to the anterior abdominal wall during Lap-PEG. With the Funada kit (F-PEG), the stomach is punctured using a gastropexy device comprised of two parallel double lumen needles. A loop is introduced through the lumen of one needle which allows placement of a suture introduced through lumen of the other needle. By repeating this twice, the stomach can be pexied at two points, with the second gastropexy suture lying approximately 2 cm from the first suture. We reviewed 71 consecutive cases of Lap-PEG we performed from 2001 to 2011. 42 patients who had Lap-PEG at the end of a laparoscopic Nissen fundoplication were excluded. We compared F-PEG ($n=6$) with conventional Lap-PEG ($n=23$).

Results: All cases were uneventful without intraoperative complications, although 1 postoperative wound infection occurred in a Lap-PEG case. Mean ages and weights at surgery and sex ratios were similar. There were no differences in requirement for analgesia, time taken to commence tube feeding, return to full feeding, and mean hospitalization. However, mean operative time was significantly shorter in F-PEG ($P<.05$: F-PEG = 28.1 minutes, Lap-PEG = 46.1 minutes).

Conclusion: Our results would suggest that F-PEG is as safe and efficient as Lap-PEG, but much quicker.

ISI-04 ESOPHAGEAL AND GASTROINTESTINAL TRACT FOREIGN BODIES IN CHILDREN

Dept. of Pediatric Surgery Northwestern St. Petersburg Medical University n.a. I.I. Mechnikov,
Russia

Nadezda S. Bondarenko, Vladimir G. Bairov, Michail V. Shebenkov, Alexander E. Orlov

Esophageal and gastrointestinal tract (GI-tract) foreign bodies (FB) are still an actual problem in younger age.

AIM: Retrospective analysis of children with FB.

METHODS AND MATERIALS: In 2006-2010 889 children (505 boys and 384 girls) were hospitalized to emergency surgical department of the Children's city hospital of St. Petersburg with the esophageal and GI-tract FB. In 2006-101, 2007-174, 2008-175, 2009-179, 2010-260.

RESULTS: The majority of patients with FB were removed endoscopically. Coins were found in 55,4% of esophageal and GI-tract FB, batteries-21,6%, other FB (bones, buttons, details of toys)-23%. After coins long staying in esophagus, posttraumatic esophagitis was found at 55 patients, hypergranulations and erosions of esophagus at 6. After batteries staying, chemical burns of esophagus were found at 9 patients, scar strictures-at 4. Bougienage was done to patients with scar strictures. After batteries staying in stomach, chemical burns of stomach were found at 13 patients. The total quantity of FB of GI-tract inferior parts-275 cases. At 271 patients FB passed through the GI-tract. The operative treatment was at 4 patients with intestinal perforations by plural magnets; at 2 patients with esophageal perforations forming esophagotracheal fistula.

CONCLUSIONS: There is a tendency of increasing number of patients every year. Endoscopical removal is the safe and effective method of treatment esophagus and stomach of FB. There is a high morbidity due to late visiting to hospital and the nature of FB.

IS1-05 Duplication of the Common Bile Duct with Abscess Formation in a Very-Low-Birth Weight Infant

Department of Gastroenterological Surgery I, Hokkaido University Graduate School of Medicine, Japan

Tadao Okada, Shohei Honda, Hisayuki Miyagi, Akinobu Taketomi

Background: We present a unique variant of a duplication of the common bile duct (CBD) with abscess formation of accessory common bile duct (ACBD), which has never, to our knowledge, been reported in the literature.

Case report: A boy was born vaginally at 30 weeks' gestation, weighing 1,344 g. The apnea episodes occurred at 42 days after birth. Results of laboratory tests showed: T-bil, 5.6 mg/dl; D-bil, 1.3 mg/dl; AST, 29 IU/l ; ALT, 8 IU/l ; CRP, 13.6 mg/dl. Ultrasonography showed an isoechoic structure measuring 26×17×15 mm in diameter without acoustic shadows, which existed posterior to the CBD at porta hepatis and anterior to the portal vein. Enhanced CT showed a cystic mass with enhanced thickening wall in the cranial portion of the 3rd duodenum. At laparotomy, a cholangiography was performed via the cystic duct, CBD, and cystic lesion which existed at the right portion of the CBD. The connection between the cystic mass and CBD was confirmed by direct vision. Duplication of the CBD with abscess formation of ACBD was confirmed. The patient underwent the anastomosis between the ACBD with abscess and 1st portion of the duodenum (choledochoduodenostomy). The patient's postoperative course was uneventful, and ultrasonography showed no further abnormalities after this operation.

Conclusions: We advocate the use of intraoperative cholangiography for successful planning of the operative procedures when duplication of the CBD is detected by contrast-enhanced CT scanning and MR imaging. Further studies are necessary for a more complete assessment of the potential advantages and pitfalls of this modality and choledochoduodenostomy.

IS1-06 Outpatient laparoscopic interval appendectomy after perforated appendicitis

Division of Pediatric Surgery, Kaohsiung Chang Gung Memorial Hospital of the CGMF, Taiwan
Shin-Yi Lee

Background

Conservative management of advanced complicated appendicitis in children is becoming more common. Interval appendectomy may be advised after successful nonoperative treatment of perforated appendicitis. To reduce the perceived morbidity of interval appendectomy, we sought to determine if the operation could be done on an outpatient basis.

Methods

This is a retrospective review of the clinical course and length of stay of 32 children who had laparoscopic interval appendectomy during a 4-year period.

Results

Of the 32 patients, 20 received laparoscopic interval appendectomy as outpatient procedure. Ten additional patients stay overnight for insurance reason. The other 2 patients were admitted because of persistence of appendix inflammation. Two of the outpatient surgery patients came back for intranet-abdominal infection. None of these patients required narcotic or parenteral analgesics after leaving the recovery room, and all accepted feedings without nausea or vomiting.

Conclusion

Of 32 patients, 20 were or could have been discharged on the day of operation and 10 stay overnight for insurance reason. When interval appendectomy is indicated, Laparoscopic appendectomy can be performed safely as an outpatient surgical procedure in most children.

IS1-07 Absent Smooth Muscle Actin Immunoreactivity of the Small Bowel Muscularis Propria Circular Layer in MMIHS

Department of Surgery, Kitasato University, School of Medicine, Japan

Hajime Takayasu, Kiyoshi Tanaka, Eiichiro Watanabe, Masahiko Watanabe

[Case] A male infant was referred antenatally because of the megabladder at 22 weeks of gestation. In total, 11 times of ultrasound-guided bladder puncture and/or vesico-amniotic shunt was performed. The bile acid concentration in amniotic fluid was slightly elevated. Polyhydroamnios was not detected. Emergent urostomy was performed on the day of birth because obstructive urethral disease was suspected. Contrast enema revealed a microcolon while an upper gastrointestinal series demonstrated an atonic distended stomach and little passage of contrast media from the stomach to duodenum. On day life of 42, the child underwent emergent laparotomy because of massive intestinal bleeding and abdominal distension. We performed jejunostomy for tube feeding and ileostomy for drainage of intestinal juice. Biopsy of ileum, jejunum and colon demonstrated intact ganglion cells. Immunohistochemical staining for alpha smooth muscle actin was selectively absent in the circular layer of the muscularis propria in ileum while the light microscopic appearance of the small bowel muscularis propria was appropriate. Ophthalmologic evaluation revealed that pupils did not respond light properly. Despite attempts to introduce feeds with aggressive prokinetic regimens, the infant continued with enteral feeding intolerance. The patient died of liver failure and massive intestinal bleeding at 7 months of age. **[Discussion]** Our case suggested that Megacystis-Microcolon-Intestinal Hypoperistalsis Syndrome (MMIHS) can be suspected in the fetus with megabladder and elevated amniotic fluid digestive enzyme. The ophthalmologic finding and immunohistochemical finding of intestine in this case suggests that MMIHS may be an intestinal myopathy related to acetylcholine receptor abnormality."

IS2-01 Duration of symptoms pre-Kasai portoenterostomy, not age at Kasai, is prognostic in biliary atresia

Juntendo University School of Medicine, Pediatric General & Urogenital Surgery, Japan

Momoko Wada, Hiroki Nakamura, John C Chang Wu, Hiroyuki Koga, Go Miyano, Rafael Dizon, Geoffrey J. Lane, Yoshifumi Kato, Tadaharu Okazaki, Atsuyuki Yamataka

Background: The prognostic importance of the age at Kasai portoenterostomy (KPE) in biliary atresia (BA) is now being challenged. We examine the age at onset and duration of symptoms as more relevant prognostic factors.

Methods: We treated 77 consecutive BA patients with KPE between 1989 and 2011. 1989 was chosen since that was when LTx became available in Japan, allowing us to focus only on cases in the LTx era in order to minimize bias in the findings. Medical records were reviewed to evaluate: age at onset of symptoms (<31 days: $n=40$, 31-60 days: $n=24$, >60 days: $n=10$), age at KPE (<31 days: $n=6$, 31-60 days: $n=23$, >60 days: $n=45$), and duration of symptoms pre-KPE (<31 days: $n=38$, 31-60 days: $n=24$, >60 days: $n=12$). Age at onset was defined as the age when the acholic stool was recorded. For each factor, the ratio of patients becoming jaundice-free (total serum bilirubin <1.2 mg/dL) and survivors with native liver were compared statistically using the Chi-squared test.

Findings: We found a significant relationship between duration of the symptom and the ratio of survivors with native liver ($p=0.03$). The ratio was reduced when duration was over 60 days. Age at onset, age at KPE, and duration of the symptom pre-KPE did not affect the jaundice-free ratio.

Interpretation: We are the first to show that duration of symptoms pre-KPE may be more prognostic than age at KPE. Our data did not support KPE at an early age, but suggest that KPE should not be delayed after diagnosis.

IS2-02 Experience of sequential intestinal transplantation after living-donor liver transplantation
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Background: Intestinal failure related liver disease (IFALD) is a life-threatening complication that may lead to liver-intestinal transplantation (LITx). LITx is often very difficult to employ for children due to the limited availability of pediatric cadaveric donors in Japan.

Case report: A 10-year-old boy had massive enterectomy due to volvulus in infancy. He developed IFALD and was referred for evaluation for possible LITx when he was 7 years old. As end-stage liver failure developed, he had repeated episodes of sepsis and gastrointestinal bleeding. He received living-donor liver transplantation (LTx) from his father and intestinal transplantation (ITx) from cadaveric donor with the interval of 2 months.

Results: He developed reperfusion injury and elevation of liver enzymes after ITx. These complications were successfully treated and resolved. Currently, at 15 months after ITx, both liver and intestinal grafts were functioning. He has shown catch-up growth.

Discussion: The organ donation from adult cadaveric donors has been recently increased after the revision of the Organ Transplant Law but the organ donation from pediatric cadaveric donors has not yet been employed in Japan. In staged approach, ITx following LTx should be performed within the interval of 1-2 months because steatohepatitis and fibrosis of liver graft continue to progress until enteral feeding is established.

Conclusions: Sequential LITx could be a treatment of choice for patients with IFALD especially in Japan where composite liver-intestinal graft from pediatric donors is practically unavailable.

IS2-03 Reappraise the effect of redo-Kasai for recurrent jaundice following Kasai operation for biliary atresia in the era of liver transplantation

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Purpose:

Biliary atresia (BA) is still the most important disorders leading to obstructive jaundice and liver cirrhosis if not effectively treated with the Kasai operation in early childhood. Even treated in time, around half the patients will have postoperative cholangitis, which leads to recurrent obstructive jaundice in a lot of patients. Redo Kasai may offer hope for clearance of biliary obstruction and jaundice-free survival, but the side effects of adhesion may make future liver transplantation difficult to perform. We reappraise the effect of redo-Kasai for recurrent jaundice following Kasai operation for BA in the era of liver transplantation.

Materials and Methods:

We review our 10 patients receiving redo Kasai for recurrent jaundice after cholangitis in a cohort of 102 patients of BA receiving Kasai operation in the Kaohsiung Chang Gung Memorial Hospital from 1986-2011.

Results:

Kasai operation was done from 22 days to 87 days with a medium of 57 days after birth. Redo-Kasai was done from 76 days to 10 m after birth a medium of 116 days. Serum total and direct bilirubin ranged from 5.1/4.3 to 10.8/8.7 mg% with a medium of 7.5/5.5 mg%, which returned to normal after redo-Kasai in 6 out of the 10 patients. Among them, one died and one received liver transplantation 3 years after the procedure. Three patients enjoyed jaundice-free survival 6 months, 12.5 years and 18 years following re-do Kasai. One lost to follow up 3 years after redo-Kasai. Among the other 4 patents with persistent jaundice following redo-Kasai, two patients received liver transplantation 2 years and 12 years later and were doing well till present. The other two patients died 1 year and 6 years later.

Conclusion:

Our results from a single institute in Taiwan indicate that redo-Kasai is still valuable in the era of liver transplantation. Jaundice can be cleared in two-thirds of the patents and long-term survival with native lives is possible for at least two out of 10. Even in those three patients who required liver transplantation, redo-Kasai could buy time and offered successful outcome in all them.

IS2-04 The Challenge of Acute Rejection in Small Bowel Transplantation

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〈Introduction〉

Diagnosis and treatment of acute cellular rejection (ACR) in small bowel transplantation (SBT) is challenging. Early diagnosis and new immunosuppressive strategies has been evolved to improve the outcome. Eight patients had received nine SBT (5 living, 4 deceased donor, DDST) at KUHP since 1996 (5 cases till 2003, 3 cases since 2006). We present the last 3 patients who received primary DDST.

〈Case reports〉

Daclizumab (Case 1 and Case 2) or Basiliximab (Case 3) were used for induction, and tacrolimus (FK) and methylprednisolone (MP) were used as maintenance immunosuppression.

Case 1 was 12 year-old female, with hypogenesis of ganglia. Biopsy on POD4 showed early rejection, treated with MP pulse and Daclizumab dose anticipation. FK trough level was maintained over 25 ng/ml during first month. Case 2 was 18 year-old male with short bowel syndrome due to volvulus of the intestine. Early rejection was detected on POD9, 81 and 141, but successfully treated with MP pulses. FK trough level was over 25 ng/ml during first month. Case 3 was 10 year-old female with hypogenesis of ganglia. FK through level on POD15 decreased to 8.4 ng/ml during conversion to oral FK and catheter-related infection. Severe rejection was diagnosed on POD19. Steroid pulse was not effective. Thymoglobulin was administered for one week (POD23-30) and FK trough level was kept 25-30 ng/ml. Gradual improvement of mucosa was observed by endoscopic and pathological findings.

〈Conclusion〉

High FK through level is essential to avoid ACR. Early ACR recognition and intensive treatment is crucial for SBT.

IS2-05 Children undergoing LRLTx for treatment of Inherited-Metabolic Diseases are prone to higher oxidative stress and complement activity

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Background

The main indications for liver transplantation (LTx) in the pediatric population includes: biliary atresia (BA) and inherited metabolic diseases (IMD).

Purpose

To evaluate whether there are differences between pediatric patients undergoing living related LTx (LRLTx) due to IMD and due to BA in terms of their oxidative and immunological status during their regular outpatient follow-up.

Material and Methods:

A clinical outpatient study measuring serum oxidative stress index (OSI) [calculated as serum oxidant/antioxidant ratio, in the form of serum total hydroperoxide/ serum biological antioxidative potential], serum terminal complement component (C5a), as an indicator of complement activity and immunological status, and transforming growth factor (TGF)- β 1, as a marker of liver fibrosis, in 16 patients (6 males and 10 females, 2.5-15 years old), who received LRLTx due to IMD [$n=6$; in the form of propionic academia ($n=1$), methylmalonic academia ($n=1$), Arginase deficiency ($n=1$), Tyrosinemia ($n=2$) and glycogen storage disease type 1 b ($n=1$), with an age range 2.4-14.6 years old] and due to BA [$n=10$; with an age range 2.9-14.5 years old].

Results:

Serum OSI, C5a and TGF- β 1 were significantly higher in the IMD group than in BA group.

Conclusion:

Patients who receive LRLTx due to IMD are prone to higher oxidative stress, complement activity and serum TGF- β 1.

IS2-06 Trans-differentiation capacity into hepatocyte-like cells of stem cells from human exfoliated deciduous teeth

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Background:

Stem cells from human exfoliated deciduous teeth (SHED) have been identified as a novel population of mesenchymal stem cells (MSCs) with self-renew and high-proliferation. SHED are capable of differentiating into several lineaged cells such as odontoblasts/osteoblasts, adipocyte and neural cells. Previously, SHED could acquire morphological characteristics of hepatocytes. However further studies needed to explore thier hepatic characteristics. Therefore in this study we tried to trans-differentiate into hepatocyte-like cells from SHED and analyzed their hepatic characteristics.

Method:

MSCs from human exfoliated deciduous teeth were isolated and expanded in vitro. Cells were characterized by their clonogenicity, stem cell marker expression and multidifferentiation capacity into specific cell lineage types. Hepatic trans-differentiation was induced thorough several steps using specific cytokines such as hepatocyte growth factor and oncostatin M.

Results:

Isolated cells formed attached colonies containing spindle shaped cells, and showed high capability of self-renewal and proliferation. They expressed CD146, CD73, but not CD34, CD45 and CD14, and showed multi-differentiation into odontoblasts/osteoblasts, adipocytes and chondrocytes, indicating that the isolated cells from human exfoliated deciduous teeth were MSC population. When cultured under hepatogenic induction condition, they showed polygonal and parenchymal? like cells resemble to hepatocytes. These polygonal cells expressed albumin and tyrosine aminotransferase and exhibited albumin secretion and urea production, indicating that SHED have a capable of differentiating into functional hepatocytes.

Conclusion:

We achieved to differentiate SHED into typical and functional hepatocytes, suggesting that SHED might be promising cell source to cure uncorrectable liver diseases, coagulopathy and enzyme deficient diseases.

IS2-07 Laparoscopic treatment of choledochal cyst in children; Review of 34 cases

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Purpose: We present our experience of using laparoscopy to treat choledochal cyst (CC) in children.

Methods: We reviewed 34 CC patients who underwent laparoscopic cyst excision (lapCE) and Roux-en-Y hepatico-jejunostomy (HJ) between 2009 and 2012. We also performed intraoperative endoscopy (intralaparoscopic endoscopy or ILE) or laparoscopic catheterization (intralaparoscopic catheterization or ILC) of the common channel and intrahepatic bile ducts (IHBD) to wash out debris.

Results: CC was fusiform in 17 and cystic in 17. IHBD dilatation was seen in 10. Four cases were diagnosed prenatally. Five cases including 1 case of preoperative bile duct perforation were treated initially by gallbladder drainage (laparoscopic in 4) followed by lapCEHJ. ILE was performed in 20 cases and ILC in 3. All debris were removed successfully. ILE also excluded distal residual cyst in fusiform CC. HJ was performed laparoscopically in 14 and transumbilically in 20, and a wide HJ at the hepatic hilum in 14 and conventional in 20. Laparoscopic ductoplasty for membranous stenosis at the confluence of the right and left hepatic ducts was required in 6 cases. Median age and weight at lapCEHJ was 2.8 years (range: 0.5 to 14) and 12.0 kg (range: 7 to 43), respectively. Median operative time was 520 (range: 310 to 950) hours. Recovery of bowel activity took on median 3.0 (range: 3 to 14) days. No case required conversion to laparotomy. Complications were: 1 case of HJ leakage that resolved spontaneously, and 1 case of jejunojejunostomy stenosis that required revision. All cases are well after median follow-up of 2.5 (range: 0.1-4) years.

Conclusion: LapCEHJ would appear to be safe in children.

IS3-01 CAN EARLY POST OPERATIVE UROFLOWMETRY REPLACE ROUTINE CALIBERATION IN EVALUATION OF HYPOSPADIAS REPAIR?

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Aim: To evaluate the role of uroflowmetry following hypospadias repair.

Material/Methods: 256 uroflowmetric studies were performed in 106 patients of hypospadias. 100 normal age matched boys formed the control group. Parameters studied included uroflow curve, voided volume, average flow velocity (Q ave), maximum velocity (Q max), total Voiding time and time to max velocity (T to Q max). Uroflowmetry was performed preoperatively and repeated post operatively 10 days after catheter removal.

Results: Ages of the patients varied from 23 months-18 years age (mean 4.6 years). The mean flow rate was 6 ml/sec and the mean maximal flow rate was 14 ml/sec in normal boys. The mean time to max velocity (T to Q max) was 35.6 secs. The mean preoperative flow rate was 5 ml/sec (3-10 ml/sec) and mean maximal preoperative flow rate was 11.5 ml/sec in boys. The mean postoperative flow rate was 5.5 ml/sec (3-15 ml/sec) and the mean maximal flow rate was 10.5 ml/sec in boys following hypospadias repair. There was no significant difference between the pre operative and post operative values of the uroflowmetric studies. A mean post operative flow rate of <4 ml/sec was associated with appearance of poor stream of urine and needed a urethral caliberation in 26 boys.

Conclusion: Uroflowmetry in early post operative period following urethroplasty can detect early stricture formation. The mean flow rate on uroflowmetry is a sensitive parameter to pick up early changes of post operative stenosis.

IS3-02 Determinants of sex of rearing in late presenters of 5 alfa reductase deficiency in developing society

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Aims and Objectives- To propound various factors, and their relative importance in guiding the determination of sex of rearing in late presenters of 5 alfa reductase deficiency in developing society.

Material and Methods- Seven patients of proven 5 alfa reductase deficiency were prospectively involved in this study between 2000 and 2011. All patients had been raised as females and presented with ambiguity of genitalia at a later age which is quite common in a developing society due to various factors. Diganosis of 5 alfa reductase deficiency was confirmed after various standard tests . On the basis of male genotype, size of phallus, response to dihydrotestosterone cream application, socioeconomic status and wishes of parents and children, sex of further rearing was advised. Repeated elaborate sessions of counselling was an integral and vital part of these decisions.

Results- After comprehensive counselling, clinical and laboratory facts, results of medical and surgical interventions, social millieu of the society and personal choice of patients and their family, six out of seven patients were advised change of sex of rearing to male and accordingly necessary interventions were done. One patient continued to be reared as female. Quality of life, acceptability in society and most importantly, ability to make a living on its own, were followed, studied and analysed.

Conclusion- Clinical facts, Social realities, employment avenues, social stigma, infertility and many other factors suggest that, in a developing society, it is strongly advisable to consider the change of sex of rearing to male in all late presenters of 5 alfa reductase deficiency.

IS3-03 Trans-Urogenital Sinus approach for Urethroplasty and Vaginoplasty

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Purpose: The surgery for urogenital sinus is very challenging. The posterior sagittal route and the transpubic approach are complex operations for this surgery. We share our experience with the repair of urogenital sinus by the trans-sinus route in selected group of children.

Aim: To evaluate the clinical records of patients who had undergone repair of the urogenital sinus by the trans-sinus route

Patients and methods: Nine patients of urogenital sinus were repaired by the perineal approach through trans sinus route from 1993-2008. The patients selected were more than seven years of age, with a large UGS (diameter more than 1.5 cm) and a low confluence of the urethra and the vagina (<1.5 cm from surface). Four of these patients had Congenital Adrenal Hyperplasia. The urethra was separated from the vagina with an inverted 'U' shaped incision and repaired in the midline anteriorly. The urethroplasty was extended anteriorly in the vestibule to make it away from the vaginal introitus. The vagina was mobilized after adequate gentle dissection and sutured in the midline and also in the perineum.

Results: Their ages ranged from 7 years to 22 years. The follow up period varied from 3 to 16 years. All patients were continent for urine with adequate urethral opening. The vaginal opening needed dilatation in two patients. The cosmetic result was excellent in all.

Conclusion: Urogenital Sinus repair by the trans-sinus route is another option for successful repair in selected patients. It avoids the need for a PSARP requiring rectal mobilization or other procedures

IS3-04 Kaniz Procedure: TRANSFISTULA ANORECTOPLASTY (TFARP) IS A MORE CONVENIENT SURGICAL APPROACH FOR CORRECTION OF RECTOVESTIBULAR FISTULA (RVF)

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Background: Different surgical approaches have been tried for management of vestibular fistula either by single or multiple stages, but most of them have post operative complications, financial burden and aesthetic appearance of the perineum. This article details a new technique, Transfistula Anorectoplasty (TFARP) - "Kaniz procedure", which includes minimal dissection without interruption of perineal body and perineal skin.

Materials and methods: This study on 40 patients with rectovestibular fistula (RVF) in Dhaka Medical College Hospital, from March 2009 to February 2011. 20 patients were treated by TFARP and 20 patients were treated by Anterior Sagittal Anorectoplasty (ASARP). Patients were followed up 2 1/2 months postoperatively.

Results: There is no statistical deference regarding age, geographical distribution, and clinical presentation. Mean operation time was 76.5 min for TFARP and 82.75 min for ASARP. Two patients had wound infection after TFARP operation and 11 patients after ASARP operation. One patient developed partial wound dehiscence after TFARP and healed after conservative treatment within 07 days. On the other hand 05 patients developed partial wound dehiscence and 04 patients developed complete wound disruption after ASARP which were also treated conservatively and needed more than 02 weeks on an average. Mean hospital stay was 6.95 days after TFARP operation and 7.85 days after ASARP operation. Twenty patients who were treated by TFARP operation have good bowel movement without laxative and symmetrical anal contraction after stimulation.

Conclusion: TFARP is an operation of less morbid, more effective and superior procedures than that of ASARP operation and also give more aesthetic appearance of the perineum.

IS3-05 Modified tubularized incised plate repair for impeding fistula formation in re-do urethroplasty or hypospadias patients with thin urethral plates

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Background: Re-do urethroplasty or hypospadias patients with thin urethral plates (TUP) are prone to post-operative urethra-cutaneous fistula (PUCF) because of compromised vascularization of the penile skin. Here we report our modified tubularized incised plate urethroplasty (mTIPU) for impeding PUCF formation.

Methods: Over the past 15 years, we have treated 276 hypospadias patients at our single institute. Of these, we used mTIPU to treat 10 patients with failed urethroplasty performed elsewhere (distal in 3, mid-shaft in 6, penoscrotal in 1) and as the initial procedure in 27 hypospadias patients with TUP (distal in 5, mid-shaft in 8, penoscrotal in 11, scrotal/perineal in 3). Mean age at mTIPU was 3.9 years (range: 1.3 to 14.0). During our mTIPU, 1.0 to 2.5 mm of superficial skin is removed along both sides of a U-shaped incision to expose intact subcutaneous tissue before tubularization of the ventral penile skin with 7/0 PDS sutures thus providing more subcutaneous tissue for the suture line of the neo-urethra compared with conventional TIPU.

Results: Two cases of PUCF developed after 7.1 years of follow-up in our series, representing an incidence of 2/37 or 5.4% which we feel is low considering that all subjects were complicated re-do or TPU patients.

Conclusions: Despite the U-shaped incision having to be made wider in our mTIPU, it would appear to be effective for impeding PUCF formation in re-do urethroplasty and TPU patients.

IS3-06 Bowel and urinary continence after scope-assisted anorectovaginoplasty for female anorectal malformation

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Aim: We assessed bowel and urinary continence after scope-assisted anorectovaginoplasty (SARVP) for female anorectal malformation (FARM).

Methods: Five cases of FARM were assessed; cases 1-2 had cloacal malformation; case 3 had urogenital sinus, rectovestibular fistula (RF); case 4 had RF, absent vagina, and spina bifida with tethered cord, and case 5 had covered cloacal exstrophy. Mean age at surgery was 3.2 (1.7-5.5) years. Treatment was SARVP using Georgeson's colon pull-through (GPT) procedure through a Pfannenstiel incision with scope assistance and perineal vaginoplasty (case 1), vagina pull-through similar to GPT (case 2), and the native RF/cloaca channel used as a vagina (cases 3-5). Bowel and urine continence were compared pre and postoperatively, and bowel continence was also assessed over time with a continence evaluation questionnaire (CEQ; maximum score, 10).

Results: SARVP was performed entirely in the lithotomy position without repositioning. Current mean age: 7.0 (5.8-10.5) years; mean follow-up: 47.4 months. At last follow-up, post-SARVP, cases 1-3 have bowel continence; case 4 is incontinent with spina bifida, and case 5 is awaiting stoma closure. CEQ scores for cases 1-4 are 7.5, 9, 10, and 2, respectively (mean score: 7.1). Cases 1-2 were continent of urine preoperatively and post-SARVP. Cases 3 and 4 have persistence of preoperative urinary incontinence postoperatively due to absence of urethral sphincters. Case 5 is continent of urine with intermittent catheterization.

Conclusion: Bowel and urinary continence were maintained because scope assistance improved the view of the pelvic floor, facilitating accurate placement of the anorectal/vaginal GPT without dissection of pelvic floor sphincter muscles.

IS4-01 Pulmonary artery size as an indication for thoracoscopic repair of congenital diaphragmatic hernia (CDH) in neonates

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Purpose: We reviewed our cases of prenatally or immediately postnatally diagnosed left-sided CDH (PI-CDH) to evaluate pulmonary artery (PA) size as an indication for thoracoscopic repair (TR).

Methods: We reviewed 34 consecutive cases of PI-CDH treated from 2007 to 2011. Seven preoperative deaths and 3 right-sided PI-CDH were excluded. We begin planning CDH repair once echocardiography confirms improvement in pulmonary hypertension and opt for TR if cardiopulmonary status is stable more than 10 minutes in the decubitus position in the neonatal intensive care unit (NICU) under conventional mechanical or high frequency oscillatory ventilation (HFOV) with/without nitric oxide (NO) and the patient seems likely to tolerate manual ventilation during transfer from NICU to the operating room, or perform open repair (OR) in NICU. Proximal right PA (RPA) and left PA (LPA) diameters were measured soon after birth, and correlated with the type of repair performed.

Results: 10/24 had TR and 14/24 had OR. For TR, prenatal diagnosis was significantly less (40% vs. 86%; $p < .05$), HFOV use was lower (70% vs. 100%, $p < .05$), NO use was less (30% vs. 86%, $p < .01$), and both RPA and LPA diameters were significantly larger (3.50 ± 0.19 mm vs. 3.13 ± 0.55 mm, $p < .05$ for RPA; 3.09 ± 0.30 vs. 2.55 ± 0.30 , $p < .01$ for LPA). Three TR were converted to OR; 2 for technical reasons, and 1 for cardiopulmonary instability.

Conclusions: Indications for TR would include RPA and LPA larger than 3.0 mm and 2.5 mm respectively, and cardiopulmonary stability without NO.

IS4-02 DOWNREGULATION OF PAX3 GENE AND MYOGENIC REGULATORY FACTORS IN THE CADMIUM-INDUCED OMPHALOCELE CHICK MODEL

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Aim: In the chick embryo, the administration of cadmium (Cd) induces omphalocele spectrum. It has been shown that the earliest histological changes in this model occur commencing 4H post Cd treatment. However, the exact molecular mechanisms by which Cd acts in this model remain unclear. PAX3 is essential for skeletal myogenesis. Four family members of muscle-specific helix-loop-helix transcription factors; MYOD, MYF5, myogenin, and MRF4, are targets of PAX3, serving as myogenic regulatory factors (MRFs). Pax3 knockouts display ventral body wall (VBW) defects, implicating a crucial role of PAX3-mediated MRFs signaling in VBW development. We hypothesized that PAX3 and MRFs are downregulated during the critical period of embryogenesis in the Cd-induced omphalocele chick model.

Methods: After 60H incubation, chick embryos were harvested 1H, 4H, and 8H post treatment with saline or Cd and divided into control ($n=24$) and Cd group ($n=24$). Real-time PCR was performed to evaluate gene expression levels of PAX3 and MRFs, and statistically analyzed. Immunofluorescence confocal microscopy was performed to evaluate PAX3 and MRFs expression/distribution in the chick embryo.

Results: The expression levels of PAX3 and MRFs genes were significantly downregulated in the Cd group compared to controls at 4H ($p<0.05$), whereas there were no significant differences at 1H and 8H. The intensity of PAX3 immunofluorescence in the dermomyotome was markedly diminished at 4H in the Cd-treated embryos.

Conclusion: Downregulation of PAX3 and MRFs during this narrow window of embryogenesis may impair VBW development, causing omphalocele in the Cd chick model by interfering with skeletal myogenesis.

IS4-03 Non-invasive Acoustic Radiation Force Impulse (ARFI) elastography for assessing the severity of fibrosis in the post-operative patients with biliary atresia

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Introduction: Liver biopsy (LB) is still considered the “gold standard” for hepatological evaluation, but recently non-invasive methods have attempted to replace this invasive procedure. Recently, acoustic radiation force impulse (ARFI) imaging has been developed as a non-invasive modality to evaluate stiffness of tissues. ARFI imaging theoretically measures liver stiffness of all the segments independently. The aim of this study is to determine whether ARFI elastography is a reliable method for predicting the severity of fibrosis in the post-operative patients with biliary atresia.

Methods: ARFI elastography was performed at twenty-one times in nine patients with biliary atresia over the last 2 years. At the same time, we measured serum hyaluronic acid (H value), which is one of the serum elastic makers, to compare against ARFI Vs values in these patients. We obtained ARFI Vs values as median of S2 to S8 by 3 consecutive measurements acquired with a Siemens Acuson S2000 (Siemens Medical Systems, Germany).

Results: Histological evaluation of fibrosis is graded from F0 (normal) to F4. The normal H value is under 50 mg/dl. One patient had F0 (H value: 29.2 mg/dl), four had F1 (H value: 11.5-18.1 mg/dl), one had F3 (H value: 61.3 mg/dl), two had F4 (H value: 29.2, 112 mg/dl). One patient with F4 whose ARFI Vs value (3.56) was the highest, needed liver transplantation and her liver cirrhotic (F4).

Conclusion: These findings suggest that ARFI measurement may be a reliable method for predicting the severity of fibrosis after a Kasai operation.

IS4-04 Giant omental lipoblastoma versus liposarcoma. CD34 and CD56 as possible differentiating markers

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A 13-month-old boy presented for a routine well-child check-up. On examination, an obvious abdominal mass was palpable in the upper abdomen. WBC, CRP, hemoglobin, PT/APTT, and α -fetoprotein were normal. Abdominal ultrasonography (US) identified a giant, echogenic, solid, multilobulated intraperitoneal mass that on computed tomography (CT) appeared as a well-encapsulated lobulated mass of fat-like density that filled the abdominal cavity almost entirely. The spleen, pancreas, gallbladder, bilateral adrenal glands, and kidneys appeared normal. Provisional diagnoses based on diagnostic imaging findings were intraperitoneal omental cyst, myxoma, and lipoblastoma. At laparotomy through a transverse upper abdominal incision, the giant fatty mass was dissected easily from the greater omentum. The tumor was encapsulated and lobulated with a yellowish, irregular surface, measuring 21.5×19×9 cm, and weighing 1,590 g. Microscopically, most lesions comprised areas of low cellularity with variable myxoid change with primitive cells in spindles or satellites, or multivacuolated lipoblasts. Tumor cells manifested neither necrosis nor mitotic activity. Areas of proliferation of small round cells were absent. Immunohistochemically, tumor cells were positive for S100, CD34 and CD56. This is the first time for CD56 to be used to differentiate lipoblastoma from liposarcoma. Omental lipoblastoma was diagnosed based on these data. Postoperative recovery was uneventful and discharge was possible one week postoperatively. After 20 months follow-up, he is disease-free, with no signs of recurrence on routine abdominal US. We report this unique case of an omental lipoblastoma with focus on its differentiation from myxoid liposarcoma.

IS4-05 Effect of Preoperative Chemotherapy in the Treatment of Advanced Wilms' Tumor
—10 Year Experience of Dhaka Medical College

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Introduction: The management of Wilms' tumor still remains a matter of great challenge to pediatric surgeons and also to pediatric oncologists. The tumor continues to be the subject of intensive investigations that with the aid of co-operative protocols by the National Wilms' Tumor Study (NWTs), have resulted in marked improvement in survival. Surgical excision remains the cornerstone of treatment of Wilms' tumor, however the dramatic improvement in overall survival is the result of coordinated use of surgery, chemotherapy and radiation therapy.

Materials and methods: This was a prospective study, started in July, 2001 and completed in June 2011 in Pediatric Surgery department of Dhaka Medical College Hospital. Preoperative chemotherapy was given in 57 patients for four cycles with vincristine and actinomycin D according to SIOP protocol (Herdrich K, 1982). The patients were followed up every 2 weeks by Ultrasonography, LFT, Hb% and chest X-ray upto one month. The size of the tumor as well as the metastatic lesions in the pre-chemotherapeutic and post-chemotherapeutic ultrasonographic findings were compared after one month.

Results: After giving neo-adjuvant chemotherapy, the size of the tumor was reduced in 49 patients and it was measured by USG after one month. The change in the metastatic lesions was also compared by USG at the same time. Three patients died during the course of neoadjuvant chemotherapy and nephroureterectomy was done in 54 patients. All the resected specimens were sent for histopathological studies. The reports revealed features of Wilms' tumor with favorable histology (FH) in 49 cases and unfavorable histology (UH) in 5 cases.

Conclusion: It is evident from this study that advanced stage of Wilms' tumor, where operative treatment was not primarily possible, preoperative chemotherapy downsized the tumor significantly. It is then possible to perform nephroureterectomy.

ISPI-01 Low income as a risk factor for traumatic brain injury in pediatric population in Taiwan
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Purpose: To investigate the risk for traumatic brain injury (TBI) in low-income children.

Methods: Based on data from the National Health Insurance, we conducted a case-control study to analyze 8,291 patients with TBI aged 1-17 years and 33,164 controls (matched by age and sex) with adjustment of covariates to study the association of low income (family background) and TBI. Low-income status was defined according to a certificate of low income proved by Taiwan's Department of Health.

Results: After adjustment, pediatric population with low income were at increased risk of TBI (odds ratio [OR] = 1.77, 95% confidence interval [CI] = 1.58-1.99). Low-income pediatric population with mental disorders had increased TBI risk compared with children without low income (adjusted OR = 2.08, 95% CI = 1.58-2.74). Increased risk of TBI was also found in low-income children with epilepsy compared with children normal family income (adjusted OR = 3.83, 95% CI = 2.04-7.18). The adjusted OR of TBI for low-income children with mental disorders and epilepsy was as high as 4.45 (95% CI = 1.96-10.1).

Conclusions: We found an increased risk of TBI in low-income children, particular among low-income children with mental disorders, epilepsy and both comorbidities.

ISPI-02 Video-Assisted Thoracoscopic lobectomy for Bronchiectasis: A Case Report

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Purpose: Single lobe lobectomy using video-assisted thoracoscopy (VATS) has been reported only rarely in the pediatric surgical literature. We first describe VATS performed for right middle and lower lobe lobectomies for bronchiectasis.

Case report: A 9-year-old girl was admitted because of recurrent cough and high fever. Computed tomography (CT) of the chest identified bronchodilation and chronic pneumonia of the right middle and lower lobes. Bronchiectasis was diagnosed and thoracoscopic lobectomy was planned. Under single lung ventilation, the child was placed in the lateral decubitus position. Thoracoscopy was commenced using two 5 mm trocars and one 12 mm trocar. Enlarged lymph nodes were found severely adhered to the pulmonary artery and vein, so a 6 cm minithoracotomy was performed in the 6th intercostal space in the mid-axillary line. Lung was retracted effectively with a pair of laparoscopic forceps inserted through a trocar. A4, A5, and V4+5 were freed, divided and ligated through the minithoracotomy while A6 and A7-10 were divided en bloc with an articulating linear cutter. The right inferior pulmonary vein was also divided with an articulating linear cutter. Bronchus distal to the upper lobe branch bronchus was divided by using an ENDO GIA vascular stapler, thus completing the middle and lower lobe lobectomies. The postoperative course was uneventful and she is well after 18 months' follow-up.

Conclusion: VATS is a safe, technically feasible approach for severe bronchiectasis of the right middle and lower lung in children.

ISP1-03 Clinical Factors Predicting Postoperative Chylothorax of Congenital Esophageal Atresia

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Japan

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Background: Chylothorax is a complicated disease after thoracic surgery and is needed intensive care for a deteriorated patient with chylothorax. The purpose of this study is to determine the incidence, risk factors, and outcomes for chylothorax in children after radical operation for congenital esophageal atresia (CEA).

Methods: The medical records of patients who were diagnosed and treated at our hospital from January 2002 through December 2011 were reviewed. All patients were neonatal and operated at primary esophageal anastomosis with resection of traceoesophageal fistula. All of the patients' clinical data, imaging findings, and outcomes, were studied and analyzed. Of 8 cases with CEA, two (25.0%) presented postoperative chylothorax and each weight at birth was 1,950 g and 1,922 g, respectively.

Results: The diagnosis of chylothorax was made at 16 days and 8 days after surgery, respectively. Both cases were responded to conservative therapy including no feeding, mild chain milk, and octreotide.

Conclusions: Chylothorax after repair of CEA might be conservatively treated with MCT milk and octreotide. It is speculated that the occurrence of chylothorax in patients with primary repair of CEA might be associated with the background of low birth weight infant.

ISPI-04 Thoracoabdominal incision in pediatric surgery

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Aim: To report our experience of thoracoabdominal incision (TAI) in children.

Methods: We used TAI in 9 children at our institute between 1996 and 2011 for the treatment of pediatric solid tumors (3 neuroblastomas originating from/around the adrenals: 1 right, 2 left; 1 right nephroblastoma; 1 hepatoblastomas originating in the S5-6 requiring right hepatectomy), 3 right-sided congenital diaphragmatic hernia (rCDH) with herniation of the entire right hepatic lobe, and 1 congenital brachioesophagus. For neuroblastoma, nephroblastoma, and hepatoblastoma cases, tumor extension caused elevation of the ipsilateral diaphragm. Surgeons' subjective evaluation of TAI, operative time, blood loss, and incidence of complications were reviewed.

Results: Mean age at TAI was 2.5 years (range: 5 days to 8 years). Generally, TAI improved overall exposure to provide a larger operative field thus allowing entire tumors to be delineated and prevent kinking of hepatic veins in rCDH cases. There were no intraoperative complications. Mean blood loss was 9 mL/kg (range: 2 to 40). Postoperative recovery was unremarkable in all. After mean follow-up of 7 years (range: 1 to 11), 2 patients with solid tumors are well and recurrence-free (40%) while the remaining 3 (60%) died from recurrence. All rCDH cases died secondary to persistent pulmonary hypertension and cardiopulmonary insufficiency. At autopsy, all had well repaired diaphragms.

Conclusions: TAI markedly enhances exposure and should be actively adopted in pediatric surgery.

ISP2-01 Factors Predicting Occurrence of Symptoms in Prenatally Diagnosed Choledochal Cyst Patients

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Background & Aims: It is difficult to identify factors predicting symptom occurrence in those with a prenatally diagnosed choledochal cyst (CC) after birth. This study was undertaken to investigate the different clinical presentations between asymptomatic and symptomatic infants with the prenatally diagnosed CC, and to identify factors predicting the occurrence of clinical symptoms in such patients.

Methods: The medical records of patients who were prenatally diagnosed with CC at our hospital from April 1962 through March 2011 were reviewed. All patients were infantile and divided into two groups: symptomatic, such as jaundice or feeding difficulty, and asymptomatic infants. All of the patients' clinical data, including blood analyses, imaging findings, and outcomes, were studied and analyzed.

Results: Of 112 cases with CC, 8 (30%) were diagnosed prenatally, and were categorized into a symptomatic infant group including 5 patients and asymptomatic infant group including 3 patients. Four of the eight (50%) patients CC were type 1 and 5 of the 8 patients (63%) presented some symptoms after birth. On the basis of abdominal imagings, lateral extension of CC over the midline was shown in 5 of 5 (100%) cases in the symptomatic group and 0 of 3 (0%) in the asymptomatic group ($p=0.0179$). The caudal extension of CC into the pelvis was shown in 3 of 5 (60%) cases in the symptomatic group and 0 of 3 (0%) in the asymptomatic group ($p=0.1964$).

Conclusions: The occurrence of symptoms in patients with prenatally diagnosed CC is significantly associated with the lateral extension of CC over the midline.

ISP2-02 Positive Hepatic Fibrosis in Symptomatic Patients with Prenatally Diagnosed Choledochal Cyst

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Background & Aims: Choledochal Cyst (CC) may present clinically with two distinct constellations determined primarily by the onset of a patient's symptoms, such as vomiting and jaundice. This study was undertaken to investigate the histological differences between symptomatic and asymptomatic infants with the prenatally diagnosed CC using liver biopsy specimens.

Methods: The medical records of patients who were prenatally diagnosed with CC at our hospital from April 1962 through March 2011 were reviewed. Liver wedge biopsy in the right lobe was performed at the time of the radical operation. Histological findings of the H & E-stained liver biopsy specimens were classified into 4 Grades (Grade 0, no abnormality; Grade 1, mild fibrosis; Grade 2, moderate fibrosis; and Grade 3, severe expansive fibrosis; Grade 4, liver cirrhosis).

Results: Of 112 cases with CC, 8 (30%) were diagnosed prenatally, and were categorized into a symptomatic infant group including 5 patients and asymptomatic infant group including 3 patients. Four of the eight (50%) patients CC were type 1 and 5 of the 8 patients (63%) presented some symptoms after birth. The symptomatic CC group consisted of one case of Grade 0 and four cases of Grade 1. The asymptomatic CC group consisted of one case of Grade 0 and two cases of Grade 1. There is histologically significant difference between symptomatic and asymptomatic infants with the prenatally diagnosed CC using liver biopsy specimens ($p = 0.0312$).

Conclusions: It is important to keep in mind that hepatic fibrosis is significantly positive in symptomatic infants with the prenatally diagnosed CC although mild hepatic fibrosis.

ISP2-03 Extrahepatic Choledochal Cystojejunostomy for Severe Intrahepatic Involvement :IV-A CBD

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Background: The incidence of choledochal cyst (CC) with intrahepatic choledochal dilatation, known as Todani's type IV-A cyst, is considerably high, and dilatation of the intrahepatic bile duct around the hepatic hilum, occasionally in the umbilical portion, is rare. We report a very rare case of a 15-year-old girl with type IV-A cyst associated with upstream intrahepatic ductal dilatation.

Case Report: The patient complained of severe abdominal pain and showed hyperamylasemia (1,104 [U/l] (50-159 [U/l])). Computed tomography revealed a Todani's type IV-A cyst with upstream intrahepatic bile duct dilatation at the hepatic hilum. Under the recovery of pancreatitis, excision of the extrahepatic bile duct cyst at the hilum and making a fenestration of the intrahepatic duct cyst, and extrahepatic cysto-jejunostomy was performed using a Roux-en-Y jejunal loop. Histologically, the inner lining of the intrahepatic cyst wall was biliary epithelium with infiltrating inflammatory cells. Although the size of intrahepatic cysts was not reduced, there was no evidence of recurrence of symptoms at 3 months post operation.

Conclusion: A hepatectomy for CC might be too invasive for infants and children as the first line treatment. Therefore, extrahepatic cysto-jejunostomy might be one of recommendable procedures for an upstream intrahepatic ductal cyst of type IV-A with dilatation of the hepatic hilum, though long term follow-up is needed.

ISP2-04 Alopecia in children following living related liver transplantation

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BACKGROUND: Alopecia is a common complication in patients following kidney-pancreas transplantation. The main cause of this complication is thought to be related to the use of long-term immunosuppression drugs. However, there are few reports of alopecia in children following liver transplantation. Therefore we aim to evaluate the incidence of alopecia in children undergone liver transplantation and its possible risk factors.

METHODS: During 1996 to 2011, 65 children had undergone living related liver transplantation. The immunosuppressive regimen comprised corticosteroids, calcineurin inhibitor (cyclosporine or tacrolimus) and a purine inhibitor (mycophenolate mofetil).

RESULTS: Alopecia occur in 3 patients (4, 62%), 2 were female and 1 was male. Underlying disease was biliary atresia in 2 patients and Allagile syndrome in 1 patient. Clinically significant alopecia (alopecia universalis) occurs in 1 patient with Allagile syndrome. All patients received tacrolimus as their immunosuppression drug. None of patient who received cyclosporine suffer alopecia. The onset between transplantation and alopecia range between 7 and 28 months. Treatment of alopecia was topical corticosteroid and topical tacrolimus, but one patient with clinically severe alopecia required conversion from tacrolimus to cyclosporine.

CONCLUSIONS: Alopecia is one of complication in children receiving tacrolimus therapy following LDLT. Prompt management of this cosmetic complication should be done to ensure patient's compliance.

ISP3-01 Disaster Preparedness in Bangladesh

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Abdul Hanif

Bangladesh has unique geographical location in South Asia. It has 4,685 km. long boundary of which the coastline is 710 km. long—all lying along the Bay of Bengal. The land is largest delta in the world. Himalayan range remains to its north and its southern coast is at the northern tip of the Bay of Bengal which converges near the coast like a funnel. Because of such location, Bangladesh is one of the most highly disaster prone countries in the world. The country, suffers frequently by various natural disasters such as cyclones and associated storm-surges, floods, droughts, tornadoes, river-bank erosions and earthquakes. These disasters, continue to impact seriously on the society in terms of grievous human casualties specially women and children, economic and social losses, disruption of livelihoods and degradation to environment. Bangladesh has constructed 1,841 cyclone shelters and 200 flood shelters for evacuation of people exposed to impending cyclone as well as flooding.

Ministry of Health also takes part in both structural and non-structural mitigation through primary health care centre like 11,000 community clinic, 1,362 Union Sub-Center and 476 Upazilla Health Complex as well as other district and tertiary level hospitals. Japan is an important development partner.

Bangladesh has an elaborate, established and experienced disaster management system from national down to the union level to mitigate the effects of disaster. Coordination amongst training, research and management centers allow us to reap the maximum mutual benefit for people in distress by frequent sharing of expertise, experience, knowledge and information.

ISP3-02 24 hour esophageal impedance-pH monitoring in pediatric or neurologically impaired patients

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Backgrounds: The acid reflux plays major roles on gastro-esophageal reflux disease (GERD) in adults. However children and neurologically impaired patients with GERD are suffering from poor feeding and weight gain or respiratory disorders. These symptoms do not seem to depend on the acidity of the gastric juice. Also, infants are fed milk several times a day so that pH in the stomach is not kept low for long periods as adults. The impedance in the esophagus mostly depends on the electrical conductivity of the luminal contents. The aim of this study is to evaluate the usefulness of impedance-pH monitoring of esophagus in such patients.

Subjects and Methods: Subjects were eleven patients suffering from poor feeding or recurrent pneumonia suggesting gastroesophageal reflux (GER). Four have had a trachea-esophageal fistula (TEF) operation and seven were with neurological impairment. Esophageal impedance and pH were measured simultaneously for 24 hours.

Results: Three of the neurologically impaired patients were diagnosed as having GER following the guideline of the pH monitoring for children. The total acid exposure time rate were 13.0%, 18.5%, 20.7% and number of acid reflux episodes were 33, 10, 11, respectively. Also, in these patients non-acid refluxes were detected 21, 15 and 32 times, respectively. In all of four patients with the TEF, delayed esophageal clearances were observed.

Conclusion: The 24 hour impedance-ph study of esophagus detected both of the acid and non-acid reflux and seemed to be useful for the esophageal motility study in children.

ISP3-03 A potential new indicator of postoperative gastrointestinal recovery: Total bilirubin in NG aspirates

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Aim: Postoperative recovery of gastrointestinal motility is traditionally monitored by assessing nasogastric (NG) aspirates (volume, color), intensity of bowel sounds, passage of flatus/motions, and radiologic findings. Here we investigate if total bilirubin (T-bil), amylase (Amy) and sodium (Na) in NG aspirates can reliably assess postoperative gastrointestinal motility.

Methods: NG aspirates from 26 laparotomies lasting more than 150 minutes in children less than 12 months old were studied for 3 months. Subjects had NG tubes (5 or 8 Fr single lumen) inserted routinely. Aspiration with bowel motility assessment was performed 3-hourly. We graded color (1 = colorless, 2 = light yellow, 3 = yellow, 4 = light green, 5 = green), and intensity of bowel sounds (1 = loud/frequent, 2 = loud/infrequent, 3 = soft/frequent, 4 = soft/infrequent, 5 = absent) for comparison. T-bil, Amy, and Na were measured in 12-hourly aspirates collected independently.

Results: Mean age at surgery was 5.6 months; mean body weight at surgery was 5.8 kg. While postoperative complications occurred, there was no consistent reduction in NG aspirate volume over time, color change was largely subjective, and bowel sounds could not be standardized. However, T-bil decreased over time (0 d: 4.4 mg/dL; 0.5 d: 2.7 mg/dL; 1.0 d: 1.6 mg/dL; 1.5 d: 1.3 mg/dL; 2.0 d: 0.4 mg/dL; 2.5 d: 0.33 mg/dL; 3.0 d: 0.21 mg/dL; 3.5 d: 0.15 mg/dL; 4.0 d: 0.06 mg/dL; 4.5 d: 0.05 mg/dL; 5.0 d: 0.02 mg/dL; 5.5 d: 0.02 mg/dL; 6.0 d: 0.01 mg/dL) while Amy and Na were inconclusive. On average, flatus was passed after 3.8 days, a motion passed after 2.1 days, oral fluids were tolerated after 4.8 days, and NG tube removal was possible after 5.9 days.

Conclusion: T-bil levels in NG aspirates could be useful as a marker of postoperative gastrointestinal motility.

ISP4-01 Laparoscopic Excision of Urachal Remnants in children ~What's indication for it?~
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Background: Traditionally open surgery through umbilicus has been indicated for the symptomatic persistent urachal remnants. Recently the laparoscopic excision of it is well described, but few papers describe properly about the indications of using laparoscopy. This paper aims to determine the indication for laparoscopic surgery against urachal remnant through our experience and literature.

Materials and Methods: We reviewed patients suffering urachal remnant which treated by laparoscopic approach against ages, symptoms, types of abnormalities, operative findings, and complications via chart review from 2009.

Results: From 2009 to 2011, 6 patients (M: F = 3 : 3) having symptomatic urachal abnormalities were treated by laparoscopic approach. The age ranges 7 month to 15 years old, and major symptom was granulation in umbilicus (N=4). The most major type of abnormalities was sinus type (N=3). All the urachal remnants could be excised completely from just above the bladder to umbilicus even though older ages containing epithelium pathologically. In infant case, the granulation was patent omphalomesenteric duct from Meckel's diverticulum, but cystic urachal remnant was revealed behind it hardly diagnosed preoperatively and possibly missed via just umbilicus approach. No complications were seen in all cases.

Conclusion: As principle of surgical management for urachal remnant involves the radical excision of all anomalous tissue, laparoscopic approach is good indication for older ages hardly archive by open surgery due to its posture. In infants, normally sufficient by open approach, but laparoscopy is useful in case of having suspicion of duplex lesion.

ISP4-02 Postnatal management of antenatally-diagnosed ovarian cysts

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Background: Over the past 3 decades, antenatal ultrasonography has come into routine use. Refinements of ultrasound equipments and techniques has led to the antenatal diagnosis of ovarian cysts. The optimal management of antenatally-diagnosed ovarian cysts is not well established. We reviewed our cases of neonatal ovarian cysts.

Methods: A retrospective record review of our patients with antenatally-diagnosed ovarian cysts managed over the last 10 years.

Results: We reviewed 16 cases of neonatal ovarian cyst. The mean birth weight was 2,996 kg, and the mean gestational age was 38 weeks. In 3 cases the antenatally-diagnosed ovarian cyst had disappeared at birth. Two cases underwent surgery at 13 and 153 days because of suspected ovarian torsion or teratoma. Pathologically, both cases were cystic lesions. Three cases with a mean longitudinal diameter of cyst at birth of 67 mm underwent percutaneous aspiration. After aspiration these cysts had a mean diameter of 22 mm and they disappeared in three months. In one case it was 18 months until the cyst vanished. Two cases were lost to follow up. Eight infants, with a cyst diameter under 5 cm at birth had no surgical treatment. They were followed for up to 185 days and their cysts vanished.

Conclusion: These findings suggest that most prenatally-diagnosed ovarian cysts vanish naturally by 18 months. Post-natal aspiration of the cysts might not be necessary after birth but may shorten the follow up period.

ISP4-03 A virilizing adrenocortical carcinoma in a 2-years-old girl

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Case: A 2-year-old girl was referred to our hospital for clitoromegaly (2 cm), precocious puberty and deep voice. Her body height was 97 cm (+3SD). She had neither the hypertension nor high level of serum corticosteroid, although serum testosterone and DHEA-S levels were higher than normal range. Abdominal MRI and CT showed enlarged left adrenal gland (30 mm diameter). Left adrenalectomy was successfully performed with laparoscopic surgery. Then serum testosterone and DHEA-S levels decreased to normal range. The pathological examination showed more than three features of the Weiss criteria. We made a diagnosis of testosterone-secreting adrenocortical carcinoma (ACC). Follow-up MRI and ultrasound showed no local recurrence, as well as normalization of serum testosterone and DHEA-S levels. One year later, clitoroplasty was performed for persistent clitoromegaly. The patient has been doing well for two years after the adrenalectomy.

Discussion: ACC is a rare neoplasm with an incidence of one case per million populations. About 60% of ACC is functional. ACC in children is different from the adult one. Virilization is more frequently seen, and has a better prognosis after complete resection in children than those in adults. Recurrences, even after seemingly complete resection, occur in incidence of 23% to 85% in the first 2 years. The overall 5-year survival rate ranges from 16% to 38% in adult.

Conclusion: ACC is a rare neoplasm, particularly in children. It is essential for pediatric surgeons to remove ACC completely with minimum invasion. Additionally, follow-up study is quite important especially for pediatric patients.

ISP4-04 Late recurrence of stage Ia ovarian mucinous cystadenocarcinoma in teenage patients:
Case report and review of the literature

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Background: Epithelial ovarian carcinomas are uncommon in pediatric and adolescent patients. Fertility preservation is a topic of concern for teenage patients, and fertility-sparing surgery has been accepted for early-stage epithelial ovarian carcinomas in patients of reproductive age.

Case report: We report the case of a 21-year-old woman with recurrent ovarian mucinous cystadenocarcinoma originally diagnosed as stage Ia. At the age of 13 years old, this patient underwent a right salpingo-oophorectomy, and was diagnosed with right ovarian tumor. Pathological findings suggested ovarian mucinous cystadenocarcinoma with FIGO stage Ia (T1a, N0, M0). Nine years after complete resection, she was referred to our hospital with a complaint of respiratory discomfort. Chest radiograph and computed tomography (CT) scans confirmed multiple coin lesions in the bilateral lung. Transbronchial lung biopsy findings suggested metastasis of the previously resected ovarian mucinous cystadenocarcinoma. Fluorine-18 fluorodeoxyglucose positron emission tomography and computed tomography (FDG PET/CT) scans and bone scintigram showed multiple metastases. Despite receiving combination chemotherapy using carboplatin and paclitaxel, she died of disease at 5 months after the diagnosis of recurrence.

Conclusion: Although minimally invasive surgical treatment and adjuvant chemotherapy are feasible for reproductive age patients, several cases of recurrence of early-stage epithelial ovarian carcinoma treated with fertility-sparing surgery without adjuvant therapy in teenage girls have been reported. Long-term prognosis of teenage patients is not favorable as compared to that of adult patients. The strategy of surgical treatment, adjuvant therapy, and planning of further follow-up are important for teenage girls with early-stage epithelial ovarian carcinoma.