# THE 9th KURE INTERNATIONAL MEDICAL FORUM (K-INT) in 2016



# Current Standards and Future Challenges

# **July 21-24**

Venue: National Hospital Organization Kure Medical Center / Chugoku Cancer Center President: Kiyomi Taniyama

第9回 呉国際医療フォーラム

●会 長:谷山 清己(院長)
 ●開 催:国立病院機構 呉医療センター・中国がんセンター
 ●開催期間:2016年7月21日(木)~24日(日)
 ●会 場:呉医療センター 4F 地域医療研修センター



RAM-A021(R1) 2015年12月作成 The 9th Kure International Medical Forum (K-INT)

"Current Standards and Future Challenges"



July 21-24, 2016

At National Hospital Organization

Kure Medical Center and Chugoku Cancer Center



Kiyomi Taniyama, M.D., Ph.D. President of the 9<sup>th</sup> K-INT Clinical Professor

Dear all distinguished guests and participants,

We are pleased to welcome all of you to the  $9^{th}$  K-INT.

In 2008, <u>K</u>ure <u>Int</u>ernational Medical Forum (K-INT) was organized at Kure Medical Center and Chugoku Cancer Center (KMCCCC) to facilitate the international academic activities of the Kure and Hiroshima areas of Japan.

KMCCCC is a referral hospital with 700 beds and has several functions as a cancer center, circulatory center, emergency care center, and perinatal center in Kure city. We are proud of its highly sophisticated and integrated medical services provided for patients. K-INT is a special place where many international guests can establish new contacts both inside and outside of Japan while sharing novel knowledge of medicine and learning the traditional customs of Japan. In this year, we will hold the ninth K-INT at KMCCCC between July 21 and 24. Its main theme is "Current Standards and Future Challenges." Special symposia upon these theme will be held on the evening of July 22 and during the whole day of

July 23.

As indicated below, different themes were selected for K-INT each year.

2008	Topics on Vascular Surgery in Asia
2009	Perinatal Medicine in Asia
2010	Chemotherapy in Asia: Lung and GI cancers
2011	Endoscopic Surgery in Asia: Current issues and future perspectives
2012	Emergency Medicine in Asia: How do we deal with it?
2013	Trends of Hepatobiliary and Pancreas Disease in Asia
2014	Approach to the Cancer Metastasis in Asia
2015	Team Approach in Modern Medicine

Kure is a small city with about 250,000 residents and is located 20km east of Hiroshima city. It is famous for the presence of a large shipbuilding company and a beautiful panorama of the inland-sea, *Setonaikai*.

Guest speakers and participants at K-INT will be in three optional tours. One is the inspection tour to KMCCCC on the morning of July 21. The other two tours are excursions to 2 UNESCO World Heritage sites: Hiroshima Peace Memorial Park on the morning of July 22 and Miyajima-Shrine on July 24. The last excursion is guided by young medical staff and student nurses at KMCCCC. In this setting, K-INT has an educational aspect as well. You would be able to enjoy sightseeing and meet young Japanese citizens in their native land.

Sincerely yours,

anitance

Kiyomi Taniyama, M.D., Ph.D.

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Kure International Medical Forum at Kure Medical Center / Chugoku Cancer Center 3-1 Aoyama-cho, Kure 737-0023, Japan Phone: 0823-22-3111 Fax: 0823-22-3273 Homepage: http://www.kure-nh.go.jp/english/index.html Revision at July 01, 2016

# The 9th Kure International Medical Forum (K-INT)

# **Current Standards and Future Challenges**

July 21 (Thu) – 24 (Sun), 2016

National Hospital Organization (NHO)

Kure Medical Center and Chugoku Cancer Center (KMC CCC) Convention Hall Address: 3-1 Aoyama-cho, Kure, 737- 0023, Japan

# July 21 Thursday, 2016

1.	Inspection Tour of NHO KMC CCC	10:00 - 12:00
2.	Inspection Tour of NHO KMC CCC Training Center	13:30 - 14:30
3.	Invited Lecture for Student Nurses	15:30 - 16:30
	1) Charintorn KOSULAWATHA and Wannapa PRUKSAWAN,	
	Rajavithi Hospital, Bangkok, Thailand	
	2) Wanee MANYAM, Queen Sirikit National Institute for Child Health, Ban	gkok, Thailand
4.	July 21 Evening Seminar	19:00 - 20:00
	Chaired by Takao HINOI, NHO KMC CCC, Japan	
	Katsunori SHINOZAKI, Hiroshima Prefectural Hospital, Hiroshima, Japan	
	A Role of Oral Oncolytics on Colorectal Cancer Chemotherapy	
	Sponsored by TAIHO PHARMACEUTICAL CO., LTD.	
5.	July 21 - 23 Poster Viewing	

# July 22 Friday, 2016

6.	<u>July 22 Luncheon Seminar</u>		12:00 - 13:00
	Chaired by Yoshinori YAI	MASHITA, NHO KMC CCC, Japan	
	Norihito OKUMURA, Kurashiki,	Japan	
	Surgical Treatment of Lu	ing Cancer in the Elderly	
	$\sim$ Challenges to High I	Risk Patients by Thoracic Surgeons $\sim$	
	Sponsored by Co	vidien Japan, Inc.	
7.	Violin Mini Concert		16:15 - 16:30
	by Yuko UCHIYAMA, Mi	ie, Japan	
8.	Opening Ceremony		16:30 - 17:00
	1) Conglatulations		
	by Kazutoshi KOMURA	Mayor of Kure City	
	by Yutaka HARA	President of Kure Medical Association	
	by Michihiro HIDE	Dean,	
		Hiroshima University Institute of Biomed	ical and Health Science
	2) Welcome and Opening Addres	s	
	by Kiyomi TANIYAMA	President of the 9th K-INT	
		3	

#### Celebration of the 9th K-INT 9.

19:00 - 21:00

- 1) by the students of KMC affiliated Kure Nursing School
- 2) by the citizen volunteers 'Ondo-no Funauta'

#### 10. July 22 Evening Session

#### > SYMPOSIUM -1

# "Dedictrice"

	"Pediatrics"	
	Chaired by Hiroko SHIMODA, Higashihiroshima Medical Center, H	igashihiroshima, Japan
	1) Takafumi GOTO, NHO Okayama Medical Center, Okayama, Jap	ban
	Support of Pediatric Surgery for Severely Multiple Handica	pped Children
		17:30 - 17:45
	2) Kadek Ayu Candra Dewi, Udayana University, Bali, Indonesia	
	Monteggia Fractures in Children; Current Approach at San	glah General Hospital Bali
		17:45 - 18:00
	3) Shuji KONDO, NHO Shikoku Medical Center for Child and Adu	lts, Zentsuji, Japan
	Pediatric Chronic Kidney Disease in Japan	
	– The Current Standards and Future Challenges	18:00 - 18:15
	4) Umaporn PHANOMTHUM, Queen Sirikit National Institute for (	Child Health, Bangkok, Thailand
	Challenge Intervention in Hearing Problem Child	18:15 - 18:30
11.	International Lecture for Residents	18:00 - 18:30
	Chaired by Tsuyoshi TORII, NHO KMC CCC, Kure, Japan	
	1) Yukako YAGI, Massachusetts General Hospital & Harvard Medi	cal School, Boston, USA
	2) Meera HAMEED, Memorial Sloan Kettering Cancer Center, New	v York, USA
10		
12.	July 22 Evening Seminar	19:00 - 20:00
	Chaired by Kazuaki TANABE, Hiroshima University, Hiros	shima, Japan
	Souya NUNOBE, Cancer Institute Hospital, Tokyo, Japan	
	The Essential Point for the Variety of the Procedures during I	aparoscopic Gastrectomy in CIH
	Sponsored by Johnson & Johnson K. K. Medical Co	mpany

#### 13. Presidential Welcome Party

at Navy Beer Hall

# July 23 Saturday, 2016

14. Satellite Program

## Signing Ceremony of the Memorandum of Understanding

- 1) University Medical Center, Ho Chi Minh City, Vietnam
- 2) Orthopaedic and Traumatologic Department Faculty of Medicine Udayana University, Bali, Indonesia
- 15. July 23 Morning Session

#### > SYMPOSIUM -2

#### "Translational Research"

#### Chaired by Miroru TAKEBAYASHI, NHO KMC CCC, Kure, Japan

	1)	Kei ITAGAKI, NHO KMC CCC, Kure, Japan	
		Serum Levels of Autotaxin in Major Depressive Disorders and Schizop	phrenia: A Pilot Study
			10:00 - 10:15
	2)	Sathit NIRAMITMAHAPANYA, Rajavithi Hospital, Bangkok, Thailand	
		Mutation Study of RET Proto-Oncogene in Multiple Endocrine Neopla	sia 2A of Thai Family:
		Single Center: Rajavithi Hospital	10:15 - 10:30
	3)	Takao HINOI, NHO KMC CCC, Kure, Japan	
		Establishment of Novel Conditional Apc-knockout Colorectal Cancer Mous	se Models with Distinct
		Genomic Stability and Its Application to Clinical Diagnosis and Therapy	10:30 - 10:45
	4)	Meera HAMEED, Memorial Sloan Kettering Cancer Center, New York, US	SA
		Next Generation Sequence in Clinical Practice	10:45 - 11:00
	5)	Yukako YAGI, Massachusetts General Hospital & Harvard Medical School	, Boston, USA
		Evaluation of 3D Reconstruction Analysis of Fluorescence In Situ Hyl	bridization (FISH)
		Slides Scanned by a Confocal WSI Scanner	11:00 - 11:15
16.	Poster	Discussion	11:30 - 12:00
17.	July 23	3 Luncheon Seminar	12:00 - 13:00
		Chaired by Kikuo NAKANO, NHO KMC CCC, Kure, Japan	
	Ke	oji TAKEDA, Osaka City General Hospital, Osaka, Japan	
		Positioning of Nivolumab in Non-Small Cell Lung Cancer	

Sponsored by ONO PHARMACEUTICAL CO., LTD. / Bristol-Myers Squibb

18. Group Photo

13:00 - 13:15

#### > SYMPOSIUM -3

#### "Respiratory, Cardiac and Care Management"

#### Chaired by Hirotaka TASHIRO, NHO KMC CCC, Kure, Japan 1) BUI Binh Bao Son, Hue University of Medicine and Pharmacy, Hue, Vietnam Vietnam Respiratory Society (VNRS) and Vietnam Pediatric Association (VPA) Guideline for the Diagnosis and Management of Asthma in Children 5 Years and Younger 13:30 - 13:452) Sorasak LOCHINDARAT, Queen Sirikit National Institute for Child Health, Bangkok, Thailand Standard Management of Childhood Pneumonia 13:45 - 14:003) Hiroto SHIMOKAWAHARA, NHO Okayama Medical Center, Okayama, Japan Impact of Lumen Enlargement Ratio on Reperfusion Pulmonary Injury Following Balloon Pulmonary Angioplasty in Patients with Chronic Thromboembolic Pulmonary Hypertension 14:00 - 14:154) Sumitra PIYANUTTAPULL, Rajavithi Hospital, Bangkok, Thailand Correlation of Plasma Copeptin Levels and Early Diagnosis of Acute Myocardial Infarction Compared with Troponin-T 14:15 - 14:305) QUEK Swee Chye, National University of Singapore, Singapore Improving Clinical Quality and Patient Safety at National University Hospital, Singapore 14:30 - 14:45

20.	Coffee Break	14:45 - 15:00

# > SYMPOSIUM -4

#### "Malignant Neoplasm"

# Chaired by Masahiro KENJO, Hiroshima High-Precision Radiotherapy Cancer Center (HIPRAC), Hiroshima, Japan

1)	Yoshiyuki ONITAKE, NHO KMC CCC, Kure, Japan	
	Telomere Biology in Neuroblastoma: Telomere Binding Proteins and	Alternative
	Lengthening of Telomeres	15:00 - 15:15
2)	Shuenn-Wen KUO, National Taiwan University Hospital, Taipei, Taiwan	
	The Evolution of Lung Cancer Surgery	15:15 - 15:30
3)	Mohammad Shukri JAHIT, Selangor, West Malaysia	
	Gastric Cancer Treatment: The Malaysia Scenarios	15:30 - 15:45
4)	Jin Hong KIM, Ajou University Medical Center, Suwon, Korea	
	New Technology of Gastrointestinal and Biliary Stents	15:45 - 16:00
5)	Masahiro KENJO, Hiroshima High-Precision Radiotherapy Cancer Center (HIP	RAC), Hiroshima, Japan
	Advanced Radiation Therapy for Cancer Treatment	16:00 - 16:15

#### 21. Closing Remarks

by Katsuyuki MORIWAKI

22. Funfest for Reunion

# July 24 Sunday, 2016

23. July 24 Sunday Session

## "Free Discussion on Prospect for the 10th K-INT" Chaired by Yoshinori YAMASHITA, NHO KMC CCC, Kure, Japan

# > Poster Presentation

P-1	Misako KAMBARA et, al., NHO Fukuyama Medical Center, Fukuyama, Japan
	A Case of a 23-year-old Man with Diphyllobothrium Nihonkaiense
P-2	Shinobu SHIMOGAKIUCHI et, al., NHO Fukuyama Medical Center, Fukuyama, Japan
	The Effect of Oral Care before Admission to Hospital to Prevent Aspiration Pneumonia
	after Upper Gastrointestinal Tract Endoscopic Submucosal Dissection
P-3	Misaki MURAYAMA et, al., NHO Fukuyama Medical Center, Fukuyama, Japan
	Special Menu to Encourage Patients Lacking an Appetite to Eat
P-4	Aditya Gitapradita, Nyoman Gde et, al., Sanglah General Hospital, Udayana University, Bali, Indonesia
	Burn Unit in Sanglah Hospital
P-5	Agung Yavatrisna Avidyaputra, TJOKORDA et, al., Sanglah General Hospital, Udayana University,
	Bali, Indonesia
	Chemotherapy Facility in Sanglah General Hospital Denpasar Bali
P-6	Dharmawan, I Putu Gede et, al., Sanglah General Hospital, Udayana University, Bali, Indonesia
	Emergency Department in Sanglah Hospital Flow Improvement: The Past, Present and Future
P-7	Mega Wiyastha, Putu et, al., Sanglah General Hospital, Udayana University, Bali, Indonesia
	Hyperbaric Oxygen Therapy in Sanglah Hospital Denpasar- Bali
P-8	Futoshi ETO, et al., NHO KMC CCC, Kure, Japan
	Complication of CD5-positive DLBCL Metachronously after the Onset of Pancreatic Cancer:
	A Case Report; Second Report
P-9	Nao NISHIDA, et al., NHO KMC CCC, Kure, Japan
	Clinicopathological Study of Parkinson's Disease with Ischemic Enteritis due to Intractable
	Constipation; Second Report
P-10	Mayumi OKUDA, et al., NHO KMC CCC, Kure, Japan
	Experience of Pancreatic Cancer Patients Undergoing Chemotherapy in an Outpatient
	Department; Second Report
P-11	Kaori WADA, et al., NHO KMC CCC, Kure, Japan
	Palliative Care Unit Staff Burnout: Background and Coping Strategies; Second Report
P-12	Fumi MASUMOTO, et al., NHO KMC CCC, Kure, Japan
	Evaluation of Education System for Clinical Trial Investigators; Second Report
P-13	Yusuke TAKAHASHI, et al., NHO KMC CCC, Kure, Japan
	Verification of Feasibility in Exceedingly-Early-Oral-Intake after Lung Resection; Second
	Report

16:20 - 16:30

Vice President of the 9th K-INT

9:00 - 17:00

- P-14 Katsushi HAGINO, et al., NHO KMC CCC, Kure, Japan
- Strategic Account Balance Management of Kure Medical Center/ Chugoku Cancer Center; Second ReportP-15 Hiroki FUJIKAWA, et al., NHO KMC CCC, Kure, Japan

A Case of Recurrent Neonatal Group B Streptococcal Disease Associated with Breast Milk Transmission ; Second Report

P-16 Kanae SAKAI, et al., NHO KMC CCC, Kure, Japan Trial of Rooming-in System and Neck Fomentation Therapy in Postnatal Care for Puerperants; Second Report

# TOPICS

# **Current Standards and Future Challenges**

Hiroshi KOHNO, M.D., Ph.D. Dean of Internal Medicine, Director, Department of Gastroenterology, National Hospital Organization Kure Medical Center and Chugoku Cancer Center, Kure, Japan



Congratulations on holding the 9<sup>th</sup> K-INT, which is held annually in Kure City. The theme this year is "Current Standards and Future Challenges".

Gastroenterology has made remarkable progress in the last 20 years. In particular, it has been determined the causes of chronic hepatitis and chronic gastritis are infections. The cause of chronic hepatitis is hepatitis C virus (HCV) and chronic gastritis is Helicobacter Pylori (HP). Today, both HCV and HP can be eliminated. As such, carcinogenesis due to these chronic inflammations will disappear in the near future. But in a few patients where infection has been eliminated, carcinogenic potential continues for a long time.

In the future, we expect to see increased incidence of small intestine, colon, biliary and pancreatic disease. However, with the advent of various new devices, less invasive treatment will also become available.

In gastroenterology today, the elimination of HCV or HP is a current standard. Patients with eliminated HCV or HP, however, must continue to be followed. Looking forward, minimally invasive treatment using new devices will become more readily available. Hirotaka TASHIRO, M.D., Ph.D. Dean of Surgery, Director, Department of Surgery, National Hospital Organization Kure Medical Center and Chugoku Cancer Center, Kure, Japan



The main theme of the 9th K-INT is "Current Standards and Future Challenges". Previously, medical practice was often based on tradition, authority or personal experiences. Recently, "Current standards" thru methods such as "Guidelines", have been established with evidence-based medicine. In contemporary times, medical practice is moving towards "Guidelines". Today, "Current standards" aim to standardize medical practice thru prevention, diagnosis and treatment, raise the quality of practice, and reduce risk to patients. Current "Guidelines", however, may still include recommendations based on opinion and retrospective studies, and may not move to standardize medical practice. For example, in the field of liver surgery, anatomical liver resection is recommended rather than partial liver resection (non-anatomical resection), but this is not based on prospective studies. Even prospective studies, especially those dependent on small samples and methodological problems, may induce misleading approaches. "Current standards" may also lose clinical relevance as new research and new medical technologies emerge. In other words "Future challenges" continually rewrite "Current standards". At the 9th K-INT, we review new basic and clinical research, which may become the origin of "Future challenges".

# Support of Pediatric Surgery for Severely Multiple Handicapped Children

Takafumi GOTO, Yasuo NAKAHARA, Shuichi KATAYAMA, Kosuke HITOMI, Yu UENO, Koji AOYAMA

Department of Pediatric Surgery, National Hospital Organization (NHO) Okayama Medical Center

Severely multiple handicapped children has a lot of complications, which are quite different from healthy individual. These complications are depended on their posture, respiratory problems, medications, and their ability to swallow. Last year, there were 823 admitted patients in our hospital (severely multiple handicapped children: 35). In 823 patients, we operated on 583 patients (severely multiple handicapped children: 28). The main operations of these children are followings: gastrostomy, tracheo-cutaneostomy, anti-refluxing operation. By the way, our members always visit to two severely multiple handicapped patient hospitals every 2 weeks. Visiting to the two hospitals are very useful for these children because of the preoperative examinations, the preoperative diagnosis, and the follow up of postoperative course. Pediatric surgeon can support for severely multiple handicapped children's QOL.

# Takafumi GOTO, M.D.

Vice Principle, National Hospital Organization (NHO) Okayama Medical Center, Okayama, Japan

#### **EDUCATION**

1979 Okayama University Medical School, Okayama, Japan

#### WORKING EXPERIENCE

1982- 1983	Staff Surgeon, National Kure Hospital, Kure, Japan
1989- 1991	Research Fellow, University of Tennessee, Knoxville, USA
1996- present	Staff Surgeon, NHO Okayama Medical Center, Okayama, Japan



# Monteggia Fractures in Children; Current Approach at Sanglah General Hospital Bali

Kadek Ayu Candra Dewi

#### Sanglah General Hospital

Monteggia fracture in children is a relatively uncommon injury, but because of the frequency at which it's missed and the serious consequences when it did, it has been a topic of interests for many years. It was first described by Giovanni Monteggia in 1814. Monteggia fracture in children present a special challenge in diagnosis because of the diversion of presentation of ossification centre around elbow in children. Recognition and understanding of this fracture have improved over the past 2 decades. Mechanism of injury is more understood and new radiology parameters have emerged. All of these have help to better diagnose and reduce number of missed Monteggia fracture.

Sanglah is the main public hospital in Bali. It services include the whole Bali and east part of Indonesia. Some of Monteggia fractures treated at this hospital are old or neglected ones which come at hospital months after their injury due to lack of knowledge and income. However some fractures are fresh but are missed on first encounter. The purpose of this presentation is to present current knowledge and approach for Monteggia fracture in children and some cases of Monteggia fractures we have treated at Sanglah hospital, old and new.

Key Words: Monteggia fracture, pediatric monteggia fracture, Sanglah Hospital

#### Kadek Ayu Candra Dewi, M.D.

Orthopaedic Surgeon and Teaching Staff, Orthopaedic and Traumatology Department, Sanglah General Hospital/ Udayana University, Bali, Indonesia

#### **EDUCATION**

2012

1998 - 2005	M.D., Airla	angga Univer	rsity School	l of Medic	ine	, Surał	baya, Ind	lonesia
2006 - 2011	Orthopaed	ic Surgeon,	Indonesia	Universi	ty,	Ortho	paedic 7	Training
	Program,	Jakarta, Indo	onesia					
2014	Pediatric	Orthopaedic	e Clinical	Fellow	of	Lee/	Runme	s Shaw
	Fellowship	NUH Singa	pore					

#### WORKING EXPERIENCE

Staff Surgeon, and Teaching Staff, Orthopaedic Department and Training Program of Sanglah General Hospital/ Udayana University, Bali, Indonesia



# Pediatric Chronic Kidney Disease in Japan – The Current Standards and Future Challenges

#### Shuji KONDO

Department of Pediatrics, National Hospital Organization (NHO) Shikoku Medical Center for Children and Adults, Zentsuji, Japan

Pediatric chronic kidney disease (CKD) including IgA nephropathy is early detected by urinary screenings for proteinuria and hematuria at school in Japan. Treatment of early stage of pediatric CKD has led to the decreasing number of children and young adults with end-stage kidney diseases (ESKD) based on chronic glomerulonephritis.

The characteristics and comorbidities of Japanese ESKD have changed over the last several decades. While the number of patients with ESKD based on chronic glomerulonephritis has decreased, the major cause for ESKD has changed to congenital anomalies of the kidney and urinary tract (CAKUT). In addition, the premature birth and low birth weight (LBW) infants, who survive through the neonatal intensive care units, face serious risks to their long-term chronic kidney disease. Three-year-old urinary screening tests in addition to the urinary screenings at school are considered as useful to early detect CAKUT and prematurity/LBW-based CKD in Japan.

#### Shuji KONDO, M.D., Ph.D.

Director, Department of Pediatrics,

National Hospital Organization (NHO) Shikoku Medical Center for Children and Adults, Zentsuji, Japan

#### **EDUCATION**

1994	M.D., Tokushima University School of Medicine, Tokushima, Japan
2002	Ph.D., Tokushima University Graduate School, Tokushima, Japan

#### WORKING EXPERIENCE

1994- 1996		Resident, Pediatrics, Tokushima University School of Medicine,
1997-1999		Tokushima, Japan
2002-2005		
2007-2015	J	
1996- 1997	٦	Pediatrician, National Kochi Hospital, Kochi, Japan
1999-2001		
2001-2002		Pediatrician, Higashi Tokushima Hospital, Tokushima, Japan
2005-2007		Assistant Researcher, Pediatrics, University of Wisconsin-Madison,
		WI, USA
2015- present		Director (2016), Pediatrics, NHO Shikoku Medical Center for
		Children and Adults, Zentsuji, Japan



# Challenge Intervention in Hearing Problem Child

#### Umaporn PHANOMTHUM

#### Queen Sirikit National Institute of Child Health

Early detection of multiple organ problem in high risk children is a big topic in policy of Thailand. Because of the government spent a lot in costs for treatment and rehabilitation in late stage and outcome is under estimate in some case. Most of children lost opportunity for learning that made their parents and themselves got poor chance their council. Deafness is one of the problem which can collect to near normal hearing if early detection and intervention in the great guideline. Queen Sirikit Institute of Child Hearth (QSNICH) is the center of excellent in many department, ENT is the new which propose to collect this problem. Guideline in WSNICH is early detection in high risk group and early treatment by hearing aid, cochlea implantation and rehabilitation. The last is contact with the special school for our children. All of these for our children who going to get the same opportunity like normal child.

# Umaporn PHANOMTHUM, M.D.

Queen Sirikit National Institute for Child Health, Bangkok, Thailand

#### **EDUCATION**

1982	M.D., Rangsit University School of Medicine, Thailand
2003	Cerficate Otolaryngology, Center of Excellent in Otolaryngology
	Head and Neck Surgery, Rajavithi Hospital, Bangkok, Thailand

#### WORKING EXPERIENCE

2003-2005	Staff, Chularat Hospital, Samutprakarn, Thailand
2005-2007	Staff , Vibharam Hospital, Bangkok, Thailand
2007- present	ENT Staff, Queen Sirikit National Institute of Child Health,
	Bangkok, Thailand



# Serum Levels of Autotaxin in Major Depressive Disorders and Schizophrenia: A Pilot Study

Kei ITAGAKI<sup>1,2</sup>, Tsutomu DOI<sup>2</sup>, Hironori KOBAYASHI<sup>2</sup>, Kenichirou NISHIMURA<sup>2</sup>, Shin KAMIGAKI<sup>2</sup>, Kenichi OGA<sup>2</sup>, Wataru OMORI<sup>2</sup>, Naoto KAJIATANI<sup>1</sup>, Hiromi ABE<sup>1</sup>, Mami Okada-Tsuchioka<sup>1</sup>, Minoru TAKEBAYASHI<sup>1,2</sup>

 $^1\mathrm{Division}$  of Psychiatry and Neuroscience, Institute for Clinical Research,  $^2\mathrm{Department}$  of Psychiatry,

National Hospital Organization (NHO) Kure Medical Center and Chugoku Cancer Center, Kure, Japan

#### Background:

Autotaxin (ATX) is major enzyme that is secreted to generate lysophosphatidic acid, which has diverse biological properties including involvement in neurodevelopmental processes, inflammation and the immune system. This suggests a possible association between ATX and the pathophysiology of psychiatric disorders.

#### Purpose:

Serum levels of ATX were examined in patients with major depressive disorders (MDD) and patients with schizophrenia (SCZ), who were applicable for electroconvulsive therapy (ECT), and compared with healthy controls. Serum levels of ATX were then compared before and after a course of ECT in patients with MDD and SCZ.

#### Methods:

This study was performed on MDD (N=37; female: 22, male: 15) and SCZ (N=25; female; 14, male: 11) following a course of ECT, and compared to the serum levels of healthy controls (N=53; female: 30, male: 23). Serum ATX concentrations were measured by ELISA. Clinical severity was assessed using the 17-item Hamilton Depression Rating Score for MDD and the Positive and Negative Syndrome Scale for SCZ.

#### Results:

In healthy controls, serum ATX levels for females were significantly higher than those of males (p < 0.001). Prior to ECT, serum ATX levels in female patients with MDD, but not with SCZ, were significantly lower (p < 0.01) than those of female healthy controls. After ECT, serum ATX levels in female MDD were significantly increased. There was a significant negative correlation between depressive symptoms and serum ATX levels in female MDD (Rho = -0.303, p < 0.05). In contrast, there were no significant differences in serum ATX levels between male psychiatric patients (both of MDD and SCZ) and male healthy controls either before or after ECT. Serum ATX levels in male psychiatric patients were not associated with symptom severity.

#### Conclusion:

Our findings suggest that serum ATX levels might be a gender-specific and state-dependent biomarker for depressive episodes in MDD.

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# Mutation Study of *RET* Proto-Oncogene in Multiple Endocrine Neoplasia 2A of Thai Family: Single Center: Rajavithi Hospital

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#### Backgound:

Multiple endocrine neoplasia type 2A (MEN 2A) is an inherited disease caused by germline mutations in the *RET* proto-oncogene, and is responsible for the development of endocrine neoplasia. Its prognosis is dependent on the appearance and spread of medullary thyroid carcinoma (MTC). Relatives at risk can be identified before clinical or biochemical signs of the disease become evident.

#### Methods:

Three families with MEN 2a (22 samples) were studied. Peripheral blood DNA was amplified by polymerase chain reaction. DNA sequence or restriction enzyme analysis was performed to detect mutations of *RET* proto-oncogene exons 11 by realtime PCR SyBr Green technique. Molecular analysis was carried out in three index patients as well as in 22 relatives of MEN2A patients.

#### Results:

Molecular studies showed a mutation at codon 634, exon 11 in all MEN 2A patients. In MEN 2A families, 9 out of 22 relatives were affected by PCR SyBr Green technique.

#### Conclusions:

The presence of *RET* C634R in the family member from is the importance evidence of thyroidectomy to prophylaxis MTC. *RET* mutation of this study is important for management MEN2A families in the future.

Keywords: MEN2A, RET mutation, Thai

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# Establishment of Novel Conditional Apc-knockout Colorectal Cancer Mouse Models with Distinct Genomic Stability and its Application to Clinical Diagnosis and Therapy

#### Takao HINOI

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#### **Background:**

Colorectal cancers (CRCs) are a heterogeneous disease, which develop through multi-step carcinogenesis via two distinct genomic instability pathways: chromosomal instability (CIN) and microsatellite instability (MSI). As such, the categorization of CRCs into distinct subtypes using a combination of biomarkers could be important for developing treatment strategies. Currently, the mutational status of the *RAS* gene is used to predict response to anti-EGFR antibody drugs, however, the development of new molecular target therapies for *RAS*-mutated CRCs continues to be an urgent need.

#### Methods:

We established two mouse models of CRC using regulatory sequences from the human CDX2 gene, which confers colon epithelium-preferential transgene expression. CDX2P-NLS  $Cre-Apc^{+/loxP}$  mouse (CPC;Apc) was generated as a model of CIN-induced CRCs, and develop tumors mainly in the distal colon. CDX2P9.5-G19 (or G22)Cre; $Apc^{flox/flox}$  mice develop MSI-induced tumors with a hypermutable phenotype in the proximal colon. To further address issues around developing a new molecular target for Ras-mutated CRCs, we generated mice with colon tumors expressing an oncogenic  $Kras^{G12D}$  allele in the presence of Apc deficiency to compare them to tumors harboring Apc deficiency alone. CDX2P9.5-G22Cre (referred to as G22Cre) mice were intercrossed with  $Apc^{flox/flox}$  mice and LSL- $Kras^{G12D}$  mice to generate  $G22Cre;Apc^{flox/flox};Kras^{G12D}$  and  $G22Cre;Apc^{flox/flox};KrasWT$  mice. Gene expression profiles of the tumors were analyzed using high-density oligonucleotide arrays.

#### **Results:**

Microarray analysis of 34,000 transcripts resulted in the identification of *Glut1* and *Rcan2*, which exhibited increased and decreased expression in the *Kras*-mutated mouse model, respectively. Immunohistochemical staining analysis showed that GLUT1 protein expression correlated with *KRAS* mutations in human colorectal cancer. The expression of the *RCAN2* was also observed to be lower in *KRAS*-mutated human CRC, suggesting that a calcineurin signal may represent a novel molecular target.

#### **Conclusion:**

These results demonstrated the validity of these new mouse models, which facilitate efforts to define novel factors that contribute to the pathogenesis of human colorectal cancer with various driver mutations.

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# Next Generation Sequence in Clinical Practice

#### Meera HAMEED

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In this era of precision and personalized medicine, next generation sequencing (NGS) technologies are being rapidly adopted by clinical laboratories. Massively parallel sequencing of nucleic acids enable us to assess unique and complex set of genomic alterations in malignant tumors and the most common current method used in oncology is mutation detection via targeted gene panels. These assays use molecular methods such as primer-based amplification or probe based capture methods to detect hotspot mutations or whole regions implicated in disease. Highly customized bioinformatics pipelines are used for accurate calling of single nucleotide variants, small indels and large genomic alterations from the next generation sequencing data. Selection of appropriate sample for testing is a prerequisite and can be a challenge as DNA yield and integrity plays a key role in selecting the target enrichment method and the appropriate NGS platform. Test validation, appropriate guidelines for detecting nucleotide variants and test reporting should be established. The talk will highlight the clinical applications of probe based target enrichment NGS assay with tumor/matched normal control paired analysis with case examples showing impact of mutational analysis and subsequent clinical outcome and genotypic/phenotypic correlation for better diagnosis.

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# Evaluation of 3D Reconstruction Analysis of Fluorescence In Situ Hybridization (FISH) Slides Scanned by a Confocal WSI Scanner

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#### Content:

Technological advances contribute to a maturation of digital pathology in clinical applications. However, there are few reports on confocal fluorescence imaging technology, which has better resolution in depth compared to wide-field fluorescence imaging. We explored benchmark features of a confocal WSI scanner for application in typical research and diagnostic imaging applications of FISH test.

#### Technology:

Multilayer Z-stack which stores all image information from each layer, and extended focus which stores the optimal image information from all scanned layers were used with the Pannoramic Confocal scanner (3DHISTECH Ltd., Budapest, Hungary). 3D reconstruction and automatic quantification of dots inside nuclei were made by Imaris (Bitplane, Zurich, Switzerland).

#### Design:

10 FISH slides were digitized at multiple layers. The resolution used was  $0.1625\mu$ m/pixel and N.A. was 1.25 with water immersion. Z-stack and extended focus were used for multiple layers scanning with 31 layers and 2 micron interval. Scanning time and file size were recorded, and image quality was assessed by visual comparison. The 3D reconstruction, quantification of dots, and co-localized analysis were made with Imaris.

#### Results:

Z-stack and extended focus had the same scanning time on the same scanning area, but Z-stack had tremendous file size than extended focus. The quantification of dots inside nuclei analysis showed that extended focus decreased the number of dots. The co-localization analysis of dots in FITC and TRITC channels indicated that extended focus increased the number of co-located dots. Multiple channels could be used to image various fluorophores, and the number of dots in each channel was quantified automatically.

#### Conclusion:

Extended focus decrease file size, but could cause incorrect analysis due to overlapping information in depth. We foresee confocal Z-stack scanning as a digital pathology tool for FISH imaging and automated diagnosis in future. We have extended our study on Cytology using the same concept.

#### Yukako YAGI, Ph.D.

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# Vietnam Respiratory Society (VNRS) and Vietnam Pediatric Association (VPA) Guideline for the Diagnosis and Management of Asthma in Children 5 years and younger

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Asthma is the most common chronic disease of childhood, and in up to half of people with asthma, symptoms begin during childhood, often early in life. Until now, we do not have an official data about morbidity and mortality of childhood asthma in Vietnam, although some regional studies showed up the prevalence of asthma in Vietnamese children around 4-8%.

There are challenges involved in diagnosing and managing asthma in children aged 5 years and younger. Early diagnosis and appropriate treatment of asthma help improving the clinical outcome and lung function.

This guideline provides information on diagnosis of asthma by age group 5 years and younger, treatment for acute exacerbations, long-term management of asthma (including severity-based asthma management for the first visit and control-based asthma management for every follow-up visit), treatment assess and adjust, choosing an inhaler device, and prevention of asthma, to allow non-specialist physicians to refer to this guideline for routine medical treatment. This guideline differs from the GINA in that it emphasizes the severity-based asthma management for the first visit, because the percentage of Vietnamese children under previous asthma control medications has been low; and it is rather similar to the Japanese Guideline for Childhood Asthma 2014. Moreover, a management method, including step-up or step-down of long-term management drugs based on the status of asthma control levels, is easy to understand, and is suitable as a frame of reference for routine medical treatment, even in the rural areas.

Key words: diagnosis, management, asthma, children 5 years and younger.

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# Standard Management of Childhood Pneumonia

#### Sorasak LOCHINDARAT

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Pneumonia is a widespread and common infectious lung disease that cause inflammation, which can lead to reduced oxygenation, shortness of breath, and death. An estimated nearly 1.2 million children younger than 5 years died in 2011 from pneumonia. Most of these deaths occurred in developing countries where access to standard management is limited and interventions that have improved care in developed countries are scarce. Despite substantial increase in our understanding of the clinical syndrome of pneumonia and its etiologies, its accurate diagnosis is challenging when clinical indicators are relied on, and improves only modestly with addition of laboratory, microbiological, or radiographic tests. Prevention programmes have lead to impressive reductions in incidence of disease. Standard management guidelines have lead to improve treatment outcome and decrease mortality, but children remain at risk of misdiagnosis and inadequate treatment. Research to address challenges in the etiological diagnosis of pneumonia and widespread implementation standard management beyond vaccines and antibiotics are necessary to mitigate the burden of pneumonia and improve child survival.

#### References

1. United National Inter-Agency Group for Child Mortality Estimation. Levels and trends in child mortality report 2012. United Nations Children's Fund.

2. Izadnegahdar R, Cohen AL, Klugman KP, Qazi SA. Childhood pneumonia in developing countries. Lancet Respir Med 2013;1: 574-84.

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(Memo)

# Impact of Lumen Enlargement Ratio on Reperfusion Pulmonary Injury Following Balloon Pulmonary Angioplasty in Patients with Chronic Thromboembolic Pulmonary Hypertension

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#### Background:

Although balloon pulmonary angioplasty (BPA) improves the hemodynamics in patients with chronic thromboembolic pulmonary hypertension (CTEPH), lethal complications such as reperfusion pulmonary injury (RPI) remain a crucial issue to overcome. From our experience, excessive lumen enlargement seems to cause RPI, which would be prevented by the use of intravascular ultrasound (IVUS) in BPA. Therefore, we investigated the predictive value in lumen enlargement to obtain maximal benefit with minimum complications by using IVUS.

#### Methods and Results:

We performed IVUS to assess 243 lesions in 43 patients ( $64.5\pm11.3$  years old). Inside the external elastic membrane cross-sectional areas (EEM CSA), lumen CSA and organized thrombus CSA were measured before and after BPA. Lumen CSA increased from  $5.8\pm3.2$  to  $9.8\pm4.8$ mm2 by BPA (p<0.0001). RPI developed 50 lesions (19.8%) recognized by computed tomography. Receiver operator characteristics analysis identified optimal lumen enlargement ratio induced RPI was 1.74. The sensitivity and specificity at this threshold were 60% and 62.2%, respectively. In the multiple regression analysis, lumen enlargement ratio after BPA was independently predicted by preprocedural balloon to EEM ratio and the amount of organized thrombus per unit area of EEM.

#### Conclusions:

Optimal lumen enlargement of target vessels by selecting adequate size of balloon based on IVUS findings appears to prevent RPI.
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# Correlation of Plasma Copeptin Levels and Early Diagnosis of Acute Myocardial Infarction Compared with Troponin-T

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#### Background:

Patients present with chest pain. Electrocardiography (ECG) sometimes not significant change and Troponin-T levels slowly increase. Diagnosis of myocardial infarction requires prolonged monitoring over 6 to 9 hours for serial blood sampling. Troponin is a marker of myocardial necrosis, the gold standard in detection of acute myocardial infarction. (AMI) Copeptin, the C-terminal part of the vasopressin prohormone, as a marker of acute endogenous stress, adds diagnosis information to cardiac troponin in early evaluation of patients with suspected myocardial infarction.

#### Objective:

To determine the correlation between plasma copeptin level and Troponin-T and copeptin level can be used early diagnosis of AMI

#### Material and Method:

Between October 2010- October 2011, patients with chest pain are presented to the emergency department of Rajavithi Hospital. They are suspected to be myocardial infarction and were consecutively enrolled in the present study. They are measured levels of plasma Copeptin and Troponin-T at presentation and 6 hours after presentation.

#### Results:

A total of 150 patients presented to the emergency department with chest pain, average age  $66.71\pm7.78$  years. The mean plasma Copeptin level was  $13.91\pm5.01$ pmol/l in acute myocardial infarction. Plasma Copeptin levels were early increased compared with troponin-T and plasma copeptin levels correlated with Troponin-T to diagnosis myocardial infarction r=0.317 at presentation, more increased correlated r=0.562 at 6 hours after presentation. Plasma Copeptin levels for diagnosis ST elevate myocardial infarction (STEMI) at presentation have area under curve (AUC) = 0.91 , p<0.001 , sensitivity 90.9%, specificity 87.8% and Non ST elevate myocardial infarction (NSTEMI) have area under curve(AUC)=0.71, p<0.001, sensitivity 88.8% , specificity 69.8% , cut off point 10.25pmol/l

#### Conclusion:

Plasma Copeptin can be used for early diagnosis myocardial infarction. The additional use of Copeptin to Troponin-T allows a rapid triage of chest pain patients to early diagnosis Non ST elevation myocardial infarction.

Keywords: Copeptin, Troponin-T, Myocardial infarction

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# Improving Clinical Quality and Patient Safety at National University Hospital, Singapore

#### QUEK Swee Chye

#### National University Hospital

As responsible healthcare organizations, it is important that we constantly strive to improve the quality of care for patients in our quest for achieving better outcomes. At the same time, we must reduce adverse events such as medical and medication errors and nosocomial infections. Patient safety is paramount.

Measurement as in the collection of indicators is necessary for us to define existing areas of concern. Through analysis of the data and defining root causes of problems, we are then able to incorporate systematic improvement and best practices into our daily routine. Such work is important and needs to be constantly on-going to meet the many challenges in healthcare, given rapid advances in medical practice, changing demographics and complexities in patient care.

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# Telomere Biology in Neuroblastoma: Telomere Binding Proteins and Alternative Lengthening of Telomeres

#### Yoshiyuki ONITAKE

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#### Purpose:

Neuroblastoma (NBL) shows remarkable biological heterogeneity, resulting in favorable or unfavorable prognoses. Previously, we reported that most unfavorable NBLs express high telomerase activity in order to maintain telomere length. Recently, telomere binding proteins (TBPs) and alternative lengthening of telomeres (ALT) have been identified as key factors of telomere maintenance.

#### Methods:

To evaluate the correlation between telomerase activity, telomere length, and the expression levels of TBPs in NBL, we analyzed and quantified these factors in 121 untreated NBLs.

#### Results:

Shortened and elongated telomere were detected in 21 (17.3%) and 11 cases (9.0%) respectively and there was a significant correlation between telomere length and the length of the 3'-OH. The tumors with shortened or elongated telomeres showed significant lower expression of TBPs except for *RAP1*. Although telomerase activity did not correlate with telomere lengths, 16 of 22 cases with high telomerase activity and 5 of 9 cases (ALT tumors) which showed long telomere without high telomerase activity resulted in death. High dose chemotherapy did not have much effect on these deceased ALT cases but their survival periods were more than 2 years and relatively long, compared with the deceased cases with non-elongated telomere, suggesting that chemo-resistance in ALT tumors may be related to slow growth rates.

#### Conclusions:

High telomerase activity is a poor prognostic factor in NBL. In the cases without high telomerase activity, those with elongated telomere also showed poor outcomes, because of chemo-resistance. Therefore, ALT and TBPs may be biomarkers for chemo-sensitivity in NBL. Thus, a better understanding of telomere biology may help define the haracteristics of individual NBLs.

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# The Evolution of Lung Cancer Surgery

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In the modern era, most thoracic operations can be performed with minimal invasive surgery (MIS), which includes traditional video-assisted thoracic surgery (VATS) and newly developed robot-assisted thoracic surgery (RATS). For better poet-operative recovery and functional preservation, we also develop minimal invasive methods in wounds, lung resections, and anesthesia.

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## Gastric Cancer Treatment: The Malaysia Scenarios

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Gastric cancer is the 8th commonest cancer in Malaysia. Majority of cases came in locally advanced stage and complicated by severe malnutrition. Treating this entity with a background of severe malnutrition is a real challenge in Malaysia.

Upper GI Surgery is the specialty responsible to treat and care for gastric cancer in Malaysia. However Upper GI Surgery training in Malaysia was just established about 15 years ago, and not many trainers and trainees were available to develop this specialty. Currently there are 4 established Upper GI centers in Malaysia. Treatment mainly surgery followed by chemotherapy. Suitable cases may undergo neoadjuvant therapy followed by surgery.

Multi team approach is important to ensure the best clinical outcomes in this group of patients whom majority is locally advanced cancer and in severe state of malnutrition. We depend very much of MDT with the oncology and the Nutrition Therapy Team to support our patient throughout the treatment.

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## **EDUCATION**

1994	M.D., National University of Malaysia (UKM), Malaysia
2002	M.D., M.Med. (Surgery), National University of Malaysia (UKM),
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2006	Upper GI Surgery Fellowship, Flinders Medical Centre,
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### WORKING EXPERIENCE

2002-2008	General and Upper GI Surgeon, Department of Surgery, Sarawak						
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## New Technology of Gastrointestinal and Biliary Stents

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Self-expanding metal stents (SEMS) have been widely used for palliation of malignant upper gastrointestinal obstruction. Placement of SEMS seems to be faster and more durable than other nonsurgical modalities, and patients may resume oral intake almost immediately after uncomplicated placement of SEMS in the upper gastrointestinal tract. SEMS designed for the enteral use become available to be placed through the working channel of the endoscope and TTS (through-the-scope) stent placement under fluoroscopy is easier and more precise than non-TTS routes. The majority of malignant upper gastrointestinal obstruction occurs within reach of the upper endoscope. Conformable uncovered and covered TTS stents with the design for prevention of migration have been also used for preoperative colonic decompression before one-stage surgical resection as well as palliation of malignant colorectal obstruction with unresectable tumor. Biliary SEMSs have been developed to overcome limitation of the diameter of plastic stents as they deliver a larger diameter stent up to 30 Fr or 10 mm, when deployed, using a relatively smaller delivery system of 7-8 Fr. This larger diameter facilitates biliary flow and improves patency rates. Recent ESGE guidelines recommend insertion of SEMS, 10-mm in-diameter, in patients with an established diagnosis of malignancy as the prime stent, whether expected survival time is >4 months or if the cost of the SEMS itself is <50% than that of ERCP procedure. Biliary uncovered SEMSs are made from stainless steel, cobalt based alloy, or a nickel- titanium (nitinol) alloy and are designed with a wire mesh. Biliary covered SEMSs were developed to overcome tumor ingrowth through the wire mesh and have non-porous covering membranes, such as polyurethane, silicone, or expanded polytetrafluoroethylene. The covering may extend over the entire length of the stent (fully covered SEMS), or small areas at the ends may be left uncovered (partly covered SEMS).

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## **EDUCATION**

1981	M.D., Yonsei University School of Medicine, Seoul, South Korea
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## WORKING EXPERIENCE

1982-1985	Resident,	Soonchunhyang	University	School	of	Medicine,	Seoul,
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## Advanced Radiation Therapy for Cancer Treatment

#### Masahiro KENJO

#### Hiroshima High-Precision Radiotherapy Cancer Center

The three main types of cancer treatment are surgery, chemotherapy and radiotherapy. These three are used separately, or if it is difficult to gain a cure, they may be combined. Surgery is the most effective method for lesions visible to the naked eye, and has the advantage of making it relatively easy to predict post-treatment outcomes. Chemotherapy can treat invisible lesions throughout the body. Radiotherapy is used as a relatively noninvasive local treatment.

Radiotherapy irradiates tumor cells with high-energy radiation to destroy them by damaging their DNA. If a sufficient dose of radiation is given, no cell can survive. An important process in radiotherapy is the determination of the target volume and radiation dose, in other words the prescription. Putting the prescription into action is called radiotherapy planning, and is usually carried out based on diagnostic imaging of the patient.

How to intensively deliver radiation to the cancer lesions is a key question, but advances in diagnostic imaging and radiotherapy equipment have made this possible. High-precision radiotherapy is the name of a recent type of radiotherapy realized using this method. In general it involves stereotactic body radiotherapy (SBRT), intensity-modulated radiotherapy (IMRT), and image-guided radiotherapy (IGRT). In some cases all three are used together.

Through the incorporation of computer technology, the field of radiology continues to advance, playing a crucial role in today's medicine. It is important to continue to engage in the effective utilization of radiation in medicine.

## Masahiro KENJO, M.D., Ph.D.

## Vice-Director, Hiroshima High-Precision Radiotherapy Cancer Center, Hiroshima, Japan

## **EDUCATION**

1993	M.D., Hiroshima University School of Medicine, Hiroshima, Japan
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## WORKING EXPERIENCE

1993- 1996	Resident, Hiroshima City Hospital, Hiroshima, Japan
1996- 1998	Clinical Fellow, Hiroshima University Hospital, Hiroshima, Japan
1998-2015	Clinical Staff, Hiroshima University Hospital, Hiroshima, Japan



# P-1 A case of a 23-year-old Man with Diphyllobothrium Nihonkaiense

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A 23-year-old male was referred to our hospital with a white 10-20cm, worm-like braid in his stools since approximately 2 years earlier. He had been to Canada to study and had a history of eating raw salmon for two month before he found white worms in the stools. We carefully inspected a worm and parasite ova and suspected Diphyllobothriidae infection based on the apparent symptoms. He was admitted to our hospital in February 2016 and was administered Praziquantel and salt-based laxative. He defecated and we collected three worms. We recognized two heads of worms, but could not find the remaining head. We therefore examined his stools 1 month later and could not find any parasite ova. We succeeded in removing these worms from the patient. We sent the worm and ovum to the Department of Parasites at the National Institute of Infection Diseases, to identify the worm. Diphyllobothrium nihonkaiense was identified by analyzing the mitochondrial cytochrome c oxidase subunit 1 (cox 1) gene through restriction fragment length polymorphism (RFLP) analysis.

#### Discussion:

The Japanese eat raw fish from both domestic and imported sources. Diphyllobothrium nihonkaiense can now be distinguished from Diphyllobothrium latum by analyzing the cox 1 gene. Prevention of Diphyllobothrium infection by identifying the source of infection and kind of Diphyllobothrium is important.

When attempting to remove parasites, the number of worm heads and bodies need to be clarified because any worm heads remaining in the intestine will grow again. When the number of heads is smaller than the number of bodies, stools need to be examined after 1 month to clarify whether any parasite ova remain in the intestine.

#### Conclusion:

We encountered a 23-year-old man with Diphyllobothrium and identified the worms as D. nihonkaiense by analyzing the gene. Successful cure was achieved with a single use of Praziquantel.

# P-2

# The Effect of Oral Care before Admission to Hospital to Prevent Aspiration Pneumonia after Upper Gastrointestinal Tract Endoscopic Submucosal Dissection

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#### Purpose:

The present study compares the effects of patients oral care before admission to hospital upon the incidence of aspiration pneumonia occurring after upper gastrointestinal tract endoscopic submucosal dissection (ESD) before fiscal year 2014 (control group) and after fiscal year 2015 (S group).

#### Methods:

Information about an appropriate method of oral care before admission for ESD was delivered via brochures to patients (S group). Aspiration pneumonia was assessed by lung CT imaging on the day after ESD.

#### Results:

Patients who cleaned their mouths before undergoing procedures were assigned to the S group (n = 17) and those who did not were assigned to a control group (n = 20). The rates of post ESD aspiration pneumonia were 0% and 9.0% in the S and control groups, respectively. The mean plaque score and mean score obtained according to the Oral Assessment Guide (ROAG) in the S group were 26.1% and 8.18, respectively.

#### Conclusions:

Coaching patients how to clean their mouths decreases the rate of post ESD aspiration pneumonia, despite a mean plaque score of 26.1% and some teeth remaining unpolished. The mean plaque score did not always decrease with an increasing frequency of cleaning the mouth. Using brochures to explain how to clean the mouth is insufficient and cooperation is needed among dentists, dental hygienists and nurses to coach individual patients to minimize plaque as well as to maintain the 0% rate of post-ESD aspiration pneumonia.

# P-3 Special Menu to Encourage Patients Lacking an Appetite to Eat

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#### Purpose:

The Department of Nutrition and Food Service of Fukuyama Medical Center sometimes provides special menus such as sushi and local dishes with visually appealing foods that different from standard hospital fare. These special menus are created through an agreement between registered nutritionists and licensed chefs. This study aimed to determine patient satisfaction with these menus.

#### Methods:

Licensed chefs who cooked the special menu distributed questionnaires to patients who consumed foods described on the special menu and collected responses between April 2015 and February 2016. Patients evaluated price, volume, seasoning, and satisfaction. **Results:** 

Responses from 264 patients were analyzed. The price of the foods on the menus were considered "reasonable", "inexpensive", and "rather inexpensive" among five grades totaled 87.1% of respondents. Satisfaction was rated "just as expected" and "more than expected" by 71.6% and 3.0% of respondents, respectively. The volume was rated "just right" by 61.4% of respondents.

#### Discussion:

The special menu satisfied most patients and psychologically encouraged those with no appetite, particularly after chemotherapy. The volume was considered excessive by 21.6% of the respondents. We plan to tailor the volume of staple foods according to sex and to improve patients' satisfaction through further collaboration between registered nutritionists and licensed chefs.

# P-4 Burn Unit in Sanglah Hospital

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#### Background:

Burns are a prevalent and burden some critical care problem. At the time of Bali Bombing 2002, Sanglah General Hospital was the biggest hospital in Bali, and they didn't have any Burn Unit with 34 burn victims that hadn't been operated yet. The patient was either operated in Emergency Operation Theatre or Central Operation Theatre. Surgeon from Australia, Singapore, Philippines come to help because there are limited Plastic Surgeon Staff in Sanglah General Hospital. In 2003, AusAID implemented a major project to build Burn Unit and train staff to improve patient care and train them to use new technology for treatment. The treatment of patients burn unit is often protracted, and large amounts of resources are often needed to achieve the medical and psychological healing that needs to occur. Simple adherence to the basics including adequate resuscitation and meticulous wound care would go a long way in achieving favorable outcomes and even in influencing mortality rates. The priorities of specialized facilities focus on stabilizing the patient, preventing infection, and optimizing functional recovery.

#### Methods:

A systematic descriptive review is performed over the resources of Burn Unit in Sanglah General Hospital Denpasar Bali to describe the strength, weaknesses, opportunities and threats over the facility to predict the effectiveness and outcomes over the Burns management.

#### Results:

A retrospective review on secondary data in Burn Unit Sanglah General Hospital Denpasar Bali was performed. A total of 214 patients were hospitalized and treated over 2015 with approximately 18 cases every month. The cases distributed based on the causes of burn, and treatment. Based on the causes, about 59% were fire injury, 20% were electrical injury, 8% were burn contracture, 7% were hot fluid injury, and the other 6% were degloving wounds. Based on treatment, about 45% cases were performed debridement, 44% were needed skin graft, 7% for flap, 2% amputated, and 2% were needed bleeding control and tendon graft. These cases distribution were supported by units which are consist of intensive care unit covered about 15 patients and a

standardized operating theatre. The general protocols in burn cases using flow chart of ATLS, and if stable and transportable, continued with Burn unit protocol using Baxter formula, and closed monitor for general state and vital sign.

#### Conclusion:

Calculation in infrastructure was required to comply with current management, and adjustment with cases distribution was also required to achieve effective outcome related with functional, aesthetic, physiological recovery and rehabilitation after Burn injury.

Keywords: Burn Unit, Sanglah General Hospital

# P-5 Chemotherapy Facility in Sanglah General Hospital Denpasar Bali

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#### Background:

Surgery was the accepted method for the primary management of most soft tissue and bone sarcomas of the extremities. However, surgery alone, especially wide resection, was associated with a high incidence of local recurrences. Nonsurgical treatment modalities (i.e., radiation therapy and chemotherapy) were found to exhibit reproducible antitumor effects against these neoplasms. The routes of chemotherapy administration have included intravenous (IV) bolus, continuous IV infusion, and local (regional) drug delivery. Many cancer patients spend hours a day in chemotherapy treatment rooms for continuous IV infusion. And for most of the patient this situation is a tiresome moment. The priorities of this specialized facilities focus on comfortable for the patient, preventing spread the toxicity of chemotherapy drug, safety of the patient and optimizing functional recovery.

#### Methods:

A systematic descriptive review is performed over the resources of chemotherapy facilities in Sanglah General Hospital Denpasar Bali to describe the strength, weaknesses, opportunities and threats over the facility to predict the effectiveness and outcomes over the Chemotherapy management.

#### Results:

A retrospective review on secondary data on Chemotherapy Facility in Sanglah General Hospital Denpasar Bali was performed. The cases distributed based on the type of malignancy, and treatment. We evaluate the patient flow, waiting time for chemotherapy, patient safety and patient satisfaction.

#### Conclusion:

Calculation in infrastructure was required to comply with current chemotherapy management, and adjustment with patient flow was also required to achieve effective outcome related with functional, aesthetic, physiological recovery after chemotherapy. *Keywords:* Chemotherapy, Oncology, Sanglah Hospital

# P-6 Emergency Department in Sanglah Hospital Flow Improvement: The Past, Present and Future

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Over the past decade, emergency departments (ED) have encountered major challenges due to increased crowding and a greater public focus on quality measurement and quality improvement. ED crowding has been associated with poorer outcomes of care, including delays in important treatment, higher complication rates, and higher mortality rates. Responding to these challenges, many EDs have worked to improve their processes and develop new and innovative models of care delivery.

Sanglah Hospital is a teaching hospital which has been met quality of services standard in accordance with KARS accreditation. Sanglah Hospital emergency department was built on the government's cooperation with Japan and started operation since March 1991, serve inpatient and outpatient in emergency. Building structure of emergency department in Sanglah Hospital is an earthquake-resistant structures, emergency department supported by several installations, among others, laboratory, radiology and other facilities as well as dealing with all the parts that are on the department in general. Inpatient room in the emergency department include MS room, Ratna room, OHDU and intermediate space.

In 2015, developed some of the facilities and programs in the emergency department include the establishment of the room Intermediate in operating theater at emergency department with a capacity of 8 beds, OHDU room (Obstetric High Defedency Unit) in midwifery at emergency department with 2 beds and RAPU room (Rapid Admision Planing Unit) in the Ratna room 1st floor.

Expected innovation services carried in Emergency Department supported by qualified human resources, adequate facilities so as to provide maximum service and satisfy people who need care at General Hospital Sanglah especially in the Emergency Department.

Keywords: Emergency Department, Sanglah Hospital, Innovation Service

# P-7 Hyperbaric Oxygen Therapy in Sanglah Hospital Denpasar-Bali

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Hyperbaric oxygen (HBO2)  $\rightarrow$  intervention in which an individual breathes near 100% oxygen intermittently while inside a hyperbaric chamber that is pressurized to greater than sea level pressure (1 atmosphere absolute, or ATA). Indication such as air or gas Embolism, Carbon Monoxide Poisoning, Decompression Sickness, Osteomyelitis (refractory), Delayed Radiation Injury, Compromised graft and flap, Sudden Sensorineural Hearing Loss. The absolute contraindication is untreated pneumothorax

The first experience Hyperbaric in Sanglah Hospital Bali was on 1996 because Bali is destiny of Tourism and most favorite place for water sport (diving). PPBI (Pengusaha Pariwisata Bahari Indonesia) write a letter to Health Minister of Indonesia to build Hyperbaric Center in Sanglah Hospital Denpasar-Bali because Bali have a lot of Tourism diagnosed with decompression illness.

Our future challenge is to improve the purpose of Hyperbaric chamber in Sanglah Hospital actually was design for divers with small entry chamber only 72 cm in diameter and small chamber (1,5 m in diameter), No medicine equipment (vital sign monitor, ventilator) in chamber and Difficult to entry for non-ambulatory patient. *Keywords:* Hyperbaric, decompression sickness, Sanglah Hospital

## P-8

# Complication of CD5-positive DLBCL Metachronously after the Onset of Pancreatic Cancer: A Case Report; Second Report

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A patient was 68 years-old female with lymphadenopathy received antiviral therapy for chronic type C hepatitis and achieved complete remission. During follow-up, pancreatic tumor 10mm in diameter found on contrasting CT, which was diagnosed by resection of lung metastatic nodule. Pancreatic juice cytology also observed intermediately differentiated adenocarcinoma. She received chemotherapy and then died.

The autopsy revealed as follows;

- 1. Caput pancreatis cancer with multiple metastatic pulmonary and hepatic nodules.
- 2. Diffuse large B-cell lymphoma with multiple lymphnodes metastasis

(neck, armpit, mediastinum, nearby the portal vein and the abdominal aorta, pelvis, mesentery, groin lymph node), pancreas, liver.

3. Cachexia was indicated as a cause of death mainly due to DLBCL.

## P-9

# Clinicopathological Study of Parkinson's Disease with Ischemic Enteritis due to Intractable Constipation; Second Report

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Parkinson's disease is a progressive neurodegenerative disease characterized clinically

by rest tremor, rigidity, bradykinesia, and postural instability. Parkinson's disease affects the central nervous system and peripheral autonomic neurons. We report on a case of Parkinson's disease with ischemic enteritis due to reducing bowel peristalsis, which caused ileus, and gut distention by bowel sympathetic nerve degeneration.

## P-10 Experience of Pancreatic Cancer Patients Undergoing Chemotherapy in an Outpatient Department; Second Report

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#### Introduction:

About eighty percent of pancreatic cancer patients are found to have inoperable cancer, and as such, is a disease with a very poor prognosis. Inoperable pancreatic cancer patients undergo chemotherapy and the place of the treatment is shifting from hospital to outpatient facilities. To maintain the best possible QOL during this time, it is important to address nursing care for palliative pain management.

The objective of this study is to clarify experiences of inoperable pancreatic cancer patients undergoing chemotherapy in an outpatient department.

#### Methods:

1. Subject: Subjects were inoperable pancreatic cancer patients who were undergoing chemotherapy in an outpatient department of two selected hospitals in Hiroshima.

2. Items of data; 1) Experience: Subjects about ways to spend time, their feelings and thinking every day, 2) Population statistical variable (age, sex)

3. Method of collecting data; A person doing research interviewed for subjects. The interviews were done once or twice per one subject.

4. Analysis; Content analysis was done about subject's experiences.

#### Results and Conclusion:

The subjects were eight, five women and three men. Their average age was 69.5 years old, from 50 to 80.

Inoperable pancreatic cancer patients undergoing chemotherapy in outpatient department lived with cancer supported by the people around them, coped with having symptoms of cancer and treatment, and evolved in their attitude and thinking about cancer and treatment.

Nurses have to communicate intentionally at necessary time supporting patient, and understand patient's need, and support patient's autonomy respectfully cooperating any specialists.

## P-11 Palliative Care Unit Staff Burnout: Background and Coping Strategies; Second Report

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#### Introduction:

Palliative Care Unit (PCU) nurses are at risk of work stress because their role involves exposure to frequent deaths and family grieving.

To identify current levels of burnout among PCU nurses, and to investigate to whom and how we should act to address burnout.

#### Methods:

Eleven PCU nurses at KMCCCC were enrolled in the study. Participants signed consent forms and the study was approved by the KMCCCC ethics committee.

#### Results:

The average age of the nurses was 36.3 years, and nurses worked in nursing for 14.5 years and specifically at the PCU for 7.4 years. Five nurses (45%) were single. Burnout prevalence was higher in nurses of the following categories: 1) In their thirties, 2) Career in nursing for 15-19 years, 3) Not professionally interested in PCU, 4) Negative workload and 5) Single.

Regarding work purpose, the eleven subjects mentioned: 1) Working for a living, 2) Finding motivation in their work, 3) Doing something they think is worthwhile.

From the survey about instances of moral support, receiving appreciative words from patients and patients' family was encouraging for PCU nurses.

#### Conclusion:

In order to encourage and prevent burnout in professional staff, emotional and mental support should be provided to nurses with a high-risk background. In addition, environment around nurses should be built to prevent burnout. It will subsequently contribute high-quality patient care.

## P-12 Evaluation of Education System for Clinical Trial Investigators; Second Report

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#### Background:

Several cases of misconduct in research have occurred over the years in Japan. Under new guidelines, measures have been taken to have a researcher's institution assume greater responsibility and create an environment to reduce misconduct. One effort is to enhance researcher integrity by conducting education.

#### Objective:

To demonstrate the impact of the clinical research education system at Kure Medical Center and Chugoku Cancer Center (KMC CCC) on the development of quality management. It is expected that investigators who initiate clinical trials will ensure high data quality.

#### Methods:

A retrospective review was performed of all clinical trial audits conducted by Pharmaceuticals and Medical Devices Agency (PMDA), Japan Cooperative Oncology Group (JCOG), NRG oncology, and cooperative groups from 2011 to 2015. The audit findings was compared between before and after the implementation of the clinical research education system. Deviation based on GCP, Ethical Guidelines for Clinical Research, and research protocol requirements were categorized as follows: 1) Failure to follow the protocol, 2) Data integrity, 3) Enrollment of ineligible subject, 4) IRB submission issue, 5) Informed consent problem, and 6) Delay in reporting SAE/UAP **Results and Conclusion:**  Since implementation of the educational system, negative audit findings have been reduced by 65%. These results indicate that the education system is effective in ensuring high data quality.

## P-13 Verification of Feasibility in Exceedingly-Early-Oral-Intake after Lung Resection; Second Report

Yusuke TAKAHASHI<sup>1</sup>, Yohei MATSUKAWA<sup>1</sup>, Yukio KOUTANI<sup>1</sup>, Hironori HAYASHI<sup>1</sup>, Hiroaki HARADA<sup>2,3</sup>, Yoshinori YAMASHITA<sup>2,3</sup>, Kiyomi TANIYAMA<sup>4</sup>

Departments of <sup>1</sup>Rehabilitation and <sup>2</sup>Respiratory Surgery, <sup>3</sup>Institute for Clinical Research, and <sup>4</sup>President, National Hospital Organization Kure Medical Center and Chugoku Cancer Center,

#### Background:

Kure, Japan

In our respiratory surgery department, if the state of the patient is good, exceedingly-early-mobilization and food-intake are implemented 4 hours after operation. Since food-intake is generally started on the next day after operation, pulmonary complications such as aspiration-related neumonia need to be considered in the case of exceedingly-early-oral-intake.

#### **Objective and Methods:**

To verify the feasibility of exceedingly-early-oral-intake, the difference in the swallowing function between the operative day and postoperative day 1 (POD1) was assessed.

Twelve consecutive patients were enrolled that were targeted for exceedinglyearly-mobilization and oral-intake after lung resection in our hospital from September to November 2015. The followings were assessed and recorded on the operation day and POD1: Food Intake LEVEL Scale of Fujishima, a repetitive saliva swallowing test, a modified water swallow test, a food test, and Dysphasia Severity Scale. The mean value of RSST and the median values of other examinations on the operative day were compared with those of POD1.

#### **Results and Conclusions:**

The average age of patients was 60.5 years old. The mean operative time was 2 hours 8 minutes. The swallow assessments of the operation day were 5.42 time (RSST), MWST5, FT5, FILS Level9, DSS Level6. Those of POD1 were 5.42 time (RSST), MWST5, FT5, FILS Level10, DSS Level7.

There was no significant difference in the swallow assessments between the operation day and POD1.

As such, it was suggested that the start of oral-intake on the operation day was feasible. We will continue this protocol and verify the results of this study through assessment of an increased number of future cases.

## P-14 Strategic Account Balance Management of Kure Medical Center and Chugoku Cancer Center; Second Report

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Kure Medical Center and Chugoku Cancer Center (KMC CCC) was established as a National Hospital Organization (NHO) hospital from the former National Hospitals of Japan. To provide high-quality medical care, research and education, the Management Strategy Office (MSO) places a priority on planning for stable hospital account balance management. MSO is responsible for analysis and statistics relating to hospital revenue in compliance with NHO guidelines.

In order to continue improving regional cooperation in providing comprehensive medical care, with a focus on advanced acute and cancer treatment at KMC CCC, and taking the demographics of the Kure region into account, we must undertake a management analysis, and make some assumptions about the future. We plan to tackle this specifically going forward.

## P-15

## A Case of Recurrent Neonatal Group B Streptococcal Disease Associated with Breast Milk Transmission; Second Report

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Research, and <sup>4</sup>President,

National Hospital Organization Kure Medical Center and Chugoku Cancer Center, Kure, Japan.

#### Background:

Group B streptococcus is a leading cause of invasive infection such as sepsis and meningitis in infants younger than three months. Exposure to breast milk represents a potential source of infection, especially in late-onset and/or recurrent GBS disease.

#### Case report:

A baby boy was delivered at 34 weeks' gestation by cesarean section. His birth weight was 2,172 g; Apgar scores were 8/10.

On day 19, he developed signs of sepsis, and intravenous ampicillin therapy was promptly started. Blood culture was positive for GBS, whereas CSF culture was negative. Breast milk culture was negative. Ampicillin was continued for 14 days.

On day 34, 48 hours after the end of ampicillin therapy, he again developed signs of sepsis. Empirically, ampicillin and cefotaxime were started. Blood culture was again positive for GBS. Breast milk culture was positive for GBS. Both GBS isolates belonged to serotype III.

#### Discussion:

According to previous reports, the rate of recurrent infection is high in cases associated with contaminated breast milk. Transmission of GBS through breast milk should be considered in cases of recurrent neonatal GBS infection and bacterial culture of breast milk should be performed in such cases.

## P-16

## Trial of Rooming-in System and Neck Fomentation Therapy in Postnatal Care for Puerperants; Second Report

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#### Purpose:

To evaluate a partial rooming-in system and fomentation therapy for alleviating puerperant fatigue.

#### Methods:

Puerperants who had term deliveries, vaginal deliveries, and chose rooming-in from the first day after delivery were enrolled. Participants signed consent forms and the study was approved by the ethics committee of Kure Medical Center and Chugoku Cancer Center. Data were gathered prospectively. Fifty-nine puerperants were divided into 2 groups, each including 29 puerperants; Control (C) group and 30 puerperants: Referral (R) group.

At the second day after delivery, puerperant fatigue was compared in terms of points (Assessment Tool for Fatigue by Working Group for Occupational Fatigue of Japan Society for Occupational Health) and free description of subjective symptoms and an index from a Visual Analog Scale (VAS, by Japan Society of Fatigue Science) between two groups as C group: full rooming-in, where the baby stays with puerperant the entire time, and R group: baby was returned to the nursery while fomentation therapy was given to puerperant. The fomentation therapy pad was a commercial product.

Significant difference was assessed as p < 0.05.

#### Results:

1. Index from a VAS

In the R group, the index was significantly reduced after fomentation therapy while the baby was in the nursery compared with before the therapy by paired t-test. The change of the index in the R group was significantly improved after the fomentation therapy compared with that in the C group by Student's t-test.

2. Points and free description of subjective symptoms

There was a significant difference regarding the points for an unstable (unrest, gloomy, restive, irritated and distracted) feeling in the C group between before and after the therapy by paired t-test. In the R group, all five patterns of feeling (drowsy, unstable, unwell, tired and blurred) categorized by the VAS showed significant improvements after the fomentation therapy by paired t-test. In the free-text description about partial rooming-in, more positive comments were reported in the R group. **Conclusion:** 

During the 48-hour period after delivery, puerperants are rather concerned about themselves and basic human needs. In that period, the second day after delivery, fomentation therapy is given while the baby is in the nursery and contributes to a sense of reassurance and allows for deep sleep by the puerperant. This seems to be effective for alleviating puerperant fatigue.

## **Speaker Instructions**



- 1. The presentation schedule is as conveyed by the secretariat prior to the congress. There will be no timekeeper present. All speakers are asked to keep to the allocated time: 15 minutes. The presentation time includes 5 minutes of discussion time.
- 2. Equipment is only available to support computer presentations (i.e., PowerPoint) in the oral sessions. We regret that equipment will not be available for slides or overhead projector (OHP) laminates.
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July 23 (Sat)	09:00 - 13:00

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\*PC Center location: the gallery of the Convention Hall, National Hospital Organization (NHO) Kure Medical Center & Chugoku Cancer Center (KMC CCC)

## Poster Session Guidelines

- The poster design should be in a portrait orientation, no larger than 90 cm wide × 120 cm tall. Use larger fonts that are easier to read. At the upper left of poster, leave a 20 cm × 20 cm space for the Panel Number. The secretariat will provide you with the panel-number label when posters are mounted. An area of 20 cm height × 70 cm in width at the upper part of the panel is to be used to label with your Poster Title, Affiliation, and Authors' Name.
- 2. Posters can be set up in the gallery of the NHO KMC CCC Convention Hall.
- 3. Push pins and tape will be available for your use.
- 4. Any posters remaining on panels after the designated removal time will be discarded by the secretariat.



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#### 【警告】

本剤は、緊急時に十分対応できる医療施設において、造血器悪性 腫瘍の治療に対して十分な知識・経験を持つ医師のもとで、本剤の 投与が適切と判断される症例についてのみ投与すること。また、本 剤による治療開始に先立ち、患者又はその家族に有効性及び危険 性を十分に説明し、同意を得てから投与を開始すること。

【禁忌】(次の患者には投与しないこと) 1.本剤の成分に対し過敏症の既往歴のある患者 2.妊婦又は妊娠している可能性のある婦人 (「妊婦、産婦、授乳婦等への投与」の項参照)

## ■ 効能・効果 ■骨髄異形成症候群

【効能・効果に関連する使用上の注意】

「臨床成績」の項の内容を熟知し、本剤の有効性及び安全性を十分に理解した 上で、適応患者の選択を行うこと。

#### ■用法·用量■

通常、成人にはアザシチジンとして75mg/m<sup>2</sup>(体表面積)を1日1回7日間皮下投 与又は10分かけて点滴静注し、3週間休薬する。これを1サイクルとし、投与を繰 り返す。なお、患者の状態により適宜減量する。

#### 【用法・用量に関連する使用上の注意】

- 1.他の抗悪性腫瘍剤との併用について、有効性及び安全性は確立していない。
- 2.原則として皮下投与を行うこと。出血傾向等により皮下投与が困難な場合は、 点滴静注を行うこと。
- 3.本剤の投与については、以下の基準を目安に、適切に減量、治療開始の延期 (休薬)及び投与中止の判断を行うこと。
- (1)グレード3以上の非血液毒性が発現した場合、治療開始前の状態に回復するまで 休薬する。次サイクル開始予定日から21日以内に回復しない場合、又は当該毒 性が重篤化した場合は投与を中止する(グレードはCTCAEに準じる)。

#### (2)血液学的検査値による投与量調節

よりも増加が認められ

る場合は該当しない)

a)治療開始前値が白血球数≥3,000/mm<sup>3</sup>、好中球数≥1,500/mm<sup>3</sup> かつ血ル振数≥75,000/mm<sup>3</sup>の全てを満たす患者

<15%

※回復:血球数≥最低值+[0.5×(治療開始前値-最低値)]

	かう血小((数量) 5,000/1111 の主てを向にすぶ自						
	当該サイクルの最低値	次サイ	クルの治療開始の延期(休薬)・減量基準				
好中球数<1,000/mm <sup>3</sup> 又は血小板数 <50,000/mm <sup>3</sup>		<ol> <li>① 治療開始前値 ルを開始する</li> <li>② 14日以内に回答</li> </ol>	動らの減少量の50%が回復※した後、次サイク 夏※しない場合、次サイクル投与量を50%量に減量する				
	※回復:血球数≧最低值+[0.5×(治療開始前值一最低值)]						
b)治療開始前値が白血球数<3,000/mm <sup>3</sup> 、好中球数<1,500/mm <sup>3</sup> 又は血小板数<75,000/mm <sup>3</sup> のいずれかに該当する患者							
	当該サイクルの最低値	次サイ	クルの治療開始の延期(休薬)・減量基準				
白はか	白血球数、好中球数又は血小板数のいずれかが治療開始前値の	<ol> <li>①治療開始前値 ルを開始する</li> <li>②14日以内に[</li> </ol>	値からの減少量の50%が回復※した後、次サイク → 回復※しない場合、下表に従う				
50%以下に減少(た) だし、同時にいずれか		骨髄細胞密度	次サイクル投与量				
に輸血等の処置なしで	>50%	100%量で継続する					
	当該サイクル開始時	15~50%	21日以内に回復※しない場合、50%量に減量する				

21日以内に回復※しない場合、33%量に減量する

#### (3)腎機能及び血清電解質による投与量調節

,			
当該サイクル	次サイクルの治療開始の延期(休薬)・減量基準		
血清重炭酸塩<20mEq/L(静脈血)	次サイクル投与量を50%量に減量する		
BUN又は血清クレアチニンが施設基準値上限を 超え、治療開始前値の2倍以上に上昇	施設基準値又は治療開始前値に回復した後、 次サイクル投与量を50%量に減量する		

#### 4.注射液の調製法及び投与法

#### (1)皮下投与

1バイアルにつき注射用水4mLを注入し、バイアルを激しく振り混ぜて均一に懸濁させる。 投与直前に再度均一な懸濁液とすること。投与量に応じて、複数箇所に分けて投与すること。 (2)点滴静注

1バイアルにつき注射用水10mLを注入し、バイアルを激しく振り混ぜて完全に溶解 する。溶解液の必要量を生理食塩液(0.9%塩化ナトリウム注射液)又は乳酸リンゲル 液50mLに混合すること。

#### ■使用上の注意(抜粋)

#### 1.慎重投与(次の患者には慎重に投与すること)

(1)感染症を合併している患者[骨髄抑制により感染症が増悪することがある。](2)肝障害の ある患者[転移性癌による広範な腫瘍病変を有する患者(特に血清アルブミン値<3.0g/dL の患者)に対し本剤を投与中、進行性肝性昏睡により死亡に至った例が報告されている。] (3)腎障害のある患者[使用経験がない。](4)高齢者(「高齢者への投与」の項参照)

#### 2.重要な基本的注意

(1)血小板減少、好中球減少及び貧血があらわれることがあるので、本剤投与前及び投与中は 血液検査(血球数算定、白血球分画測定等)を定期的に行い、患者の状態を十分観察し、異常が 認められた場合には、減量、休薬又は投与中止など、適切な処置を行うこと(「用法・用量に関連 する使用上の注意」の項参照)。(2)腎不全、腎尿細管性アシドーシス等の腎障害があらわれる ことがあるので、定期的に血清重炭酸塩(静脈血)や腎機能の推移を確認し、異常が認められた 場合には、減量、休薬又は投与中止など、適切な処置を行うこと(「用法・用量に関連する使用上 の注意」の項参照)。(3)生殖可能な年齢の患者に投与する必要がある場合には、性腺に対する 影響を考慮すること[動物実験(マウス及びラット)で、とトの臨床用量を下回る用量で、本剤を 投与した雄で精巣毒性が認められ、交配した雌の妊娠率の低下、異常胚の増加及び胚死亡の 増加が認められている。](「妊婦、産婦、授乳,佛等への投与」の項参照)。(3)

#### 3.副作用

国内臨床試験における副作用は、骨髄異形成症候群(MDS)患者53例中53例(100.0%)に 認められた。主な副作用は、好中球減少症(発熱性好中球減少症を含む)47例(88.7%)、血小板 減少症46例(86.8%)、白血球減少症45例(84.9%)、ヘモグロビン減少30例(73.6%)、 便秘37例(69.8%)、赤血球減少症、注射部位反応(紅斑、発疹、そう痒感、硬結等)各36例 (67.9%)、ヘマトクリット減少32例(60.4%)、リン(球減少症28例(52.8%)、倦怠感27例 (50.9%)、発熱22例(41.5%)、ALT(GPT)増加、食欲不振各20例(37.7%)、発疹、ALP 増加各19例(35.8%)、AST(GOT)増加、血中アルブミン減少各18例(34.0%)であった。

#### ●重大な副作用

1)骨髄抑制:好中球減少症(発熱性好中球減少症を含む)(88.7%)、血小板減少症(86.8%)、 白血球減少症(84.9%)、赤血球減少症(67.9%)、リンパ球減少症(52.8%)、汎血球減少症 (頻度不明注1)、貧血(頻度不明注1)、無顆粒球症(頻度不明注1))等があらわれることがあるので、 定期的に血液検査(血球数算定、白血球分画測定等)を実施するなど観察を十分に行い、異常が 認められた場合には投与を中止するなど、適切な処置を行うこと。2)感染症:敗血症(3.8%)、肺炎 (13.2%)等の感染症があらわれることがあるので、観察を十分に行い、異常が認められた場合には 投与を中止するなど、適切な処置を行うこと。3)出血(頻度不明注1)):脳出血、頭蓋内出血、消化管 出血、眼出血、血尿、処置後出血等があらわれることがあるので、観察を十分に行い、異常が認め られた場合には投与を中止するなど、適切な処置を行うこと。4)間質性肺疾患(頻度不明注1): 間質性肺疾患があらわれることがあるので、咳嗽、呼吸困難、発熱等の臨床症状を十分に観察し、 異常が認められた場合には、胸部X線、胸部CT等の検査を実施すること。間質性肺疾患が疑われた 場合には投与を中止し、副腎皮質ホルモン剤の投与等の適切な処置を行うこと。5)心障害:心房 細動(3.8%)、心不全(1.9%)等の心障害があらわれることがあるので、観察を十分に行い、症状 や徴候がみられた場合には速やかに検査を行い、投与を中止するなど、適切な処置を行うこと。 6)ショック、アナフィラキシー様症状(頻度不明注1)):ショック、アナフィラキシー様症状があら われることがあるので、バイタルサインのモニタリングや自他覚症状など、観察を十分に行い、 異常が認められた場合には直ちに投与を中止し、適切な処置を行うこと。7) 肝機能障害、黄疸: ALT(GPT)増加(37.7%)、ALP増加(35.8%)、AST(GOT)増加(34.0%)、血中ビリルビン 増加(24.5%)等を伴う肝機能障害、黄疸があらわれることがあるので、観察を十分に行い、異常が 認められた場合には投与を中止するなど、適切な処置を行うこと。8) 腎不全、腎尿細管性アシドーシス: 腎不全(1.9%)、腎尿細管性アシドーシス(頻度不明注1))等の腎障害があらわれることがあるので、 定期的に検査を実施し、観察を十分に行い、異常が認められた場合には投与を中止するなど、 適切な処置を行うこと。9)低血圧(頻度不明注1)):起立性低血圧、低血圧があらわれることが あるので、観察を十分に行い、異常が認められた場合には、適切な処置を行うこと。

注1)本剤の承認までの臨床試験ではみられなかったが、外国の添付文書等に記載された副作用又は市販後に報告された 副作用であるため頻度不明。

#### ■承認条件 ■

国内での治験症例が極めて限られていることから、製造販売後、一定数の症例に係るデータが 集積されるまでの間は、全症例を対象に使用成績調査を実施することにより、本剤使用患者の 背景情報を把握するとともに、本剤の安全性及び有効性に関するデータを早期に収集し、本剤の 適正使用に必要な措置を講じること。

●その他の使用上の注意等に つきましては、添付文書を ご参照ください。




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#### タケダから、世界中の人々へ。 より健やかで輝かしい明日を。

ー人でも多くの人に、かけがえのない人生をより健やかに 過ごしてほしい。タケダは、そんな想いのもと、1781年の 創業以来、革新的な医薬品の創出を通じて社会とともに 歩み続けてきました。

私たちは今、世界のさまざまな国や地域で、予防から 治療・治癒にわたる多様な医療ニーズと向き合っています。 その一つひとつに応えていくことが、私たちの新たな使命。 よりよい医薬品を待ち望んでいる人々に、少しでも早く お届けする。それが、いつまでも変わらない私たちの信念。

世界中の英知を集めて、タケダはこれからも全力で、 医療の 未来を切り拓いていきます。

www.takeda.co.jp

武田薬品工業株式会社

保険適用 新辞 外皮用殺菌消毒剤(オラネキシジングルコン酸塩液) オラネジン。消毒液1.5% オラネジン。液1.5%消毒用アプリケータ10mL・25mL Olanedine, Antiseptic Solution 1.5% / Olanedine, Solution 1.5% Antiseptic Applicator 10mL+25mL 感染リスクに、 新たなチカラ

【禁忌(次の患者には使用しないこと)】 本剤の成分に対し過敏症の既往歴のある患者

#### 効能·効果

手術部位(手術野)の皮膚の消毒

《効能・効果に関連する使用上の注意》

製造販売元

- 1.創傷部位(手術創を含む切創、びらん、潰瘍等)に使用しないこ と。[創傷部位への使用により血中濃度が上昇するおそれがあ る(【薬物動態】の項\*参照)。創傷部位への使用による安全性は 確立していない。]
- 2.粘膜に使用しないこと。(類薬のクロルヘキシジン製剤におい て、粘膜面への使用によりショック症状が発現したとの報告が あり、粘膜面への使用は禁忌とされている。)

※添付文書の【薬物動態】の項をご参照ください。

販売提携

東京都千代田区神田司町2-9

#### 用法·用量

株式会社大塚製薬工場 德島県鳴門市撫養町立岩字芥原115

本剤を適量塗布する。

Otsuka

◆その他の使用上の注意等は、製品添付文書をご参照ください。 資料請求先 大塚製薬株式会社

使用上の注意一抜粋一

(2)喘息等のアレルギー疾患の既往歴、家族歴のある患者

(3) クロルヘキシジン製剤に対し過敏症の既往歴のある患者

使用に際しては本剤の成分に対する過敏症の既往歴、薬物過敏体

国内16施設で実施した腹腔鏡下での消化器手術施行予定の患者

を対象とした臨床第Ⅲ相試験において、安全性評価対象52例中3

副作用は、適用部位皮膚炎、適用部位紅斑及び適用部位そう痒感

副作用が認められた場合には、使用を中止するなど適切な処置を

1.慎重投与(次の患者には慎重に使用すること) (1)薬物過敏症の既往歴のある患者

質の有無について十分確認すること。

例(5.8%)、3件の副作用が認められた。

が各1例(1.9%)1件であった。(承認時、2015年)

2.重要な基本的注意

3.副作用

行うこと。



〈'15.09作成〉





# 世界中の 「治したい」に、 こたえたい。

「治せない 病気」を、ひとつ でも多く「治せる病気」 に。この想いが、ギリアド・ サイエンシズの原点です。社会 問題にまでなったAIDS。世界でインフル エンザ・パンデミックをひき起こした、新型 インフルエンザ。治療をしないと重大な疾患に つながる恐れのあるB型、C型肝炎。こうした生命を 脅かす疾患に苦しむ患者さんのために、革新的な治療法を 開発してきました。未だ医療ニーズが満たされていない領域 に新しい治療法でこたえを見つけていくこと。これが研究 開発型パイオファーマ企業の使命だと考えています。日本では、 まずC型肝炎領域に注力してまいります。これからも新しいくすりを 待つ人のために、私たちの研究開発の道のりはまだ続きます。 古代より、治す力があると知られていた木、「ギリアドバーム (Balm of Gilead)」。 ギリアド・サイエンシズの社名はこの木に由来したもので、ロゴマークもその木の 業を表現しています。現代のバイオサイエンスによる治す力を駆使して、 世界中の患者さんとその家族に笑顔をもたらそうとする ギリアド・サイエンシズの企業姿勢を 象徴しています。

私たちには、こたえる使命がある。ギリアド・サイエンシズ





10歳の誕生日。父が、望遠鏡と宇宙の不思議をプレゼントしてくれた。 初めて土星を見た僕は、すっかり宇宙のとりこに。

あれから20年、今僕は、富士通で宇宙分野の仕事に携わっている。国立天文台ハワイ観測 所にある「すばる」も、そのひとつ。富士通は、巨大望遠鏡「すばる」の操作や、膨大な観測 データを処理し蓄積するシステムを開発。地球に似た惑星を探したり、130億光年の遥か彼 方を見つめ、宇宙誕生の謎に迫ろうとしています。

そのワクワクに先端技術でこたえたい。 富士通は挑み続けています。

http://www.fujitsu.com/jp/



夢をかたちに

shaping tomorrow with you



# 

STA DIREA

# Aperio® AT2

#### 洗練されたワークフローが自動化を加速する

Aperio®AT2は最大400枚のスライドを自動処理することができ、最もコンパクトな高処理能力の次世代スキャナーです。 円型回転式オートローダーによりスライドのローダー内の移動距離を最小化し、巧みな操作でスライドを安全に扱い、 高い生産性を実現します。高速かつ高品質なスキャニングを実現しながら低い再スキャン率を誇ります。

feica

#### 特徴

●最大400枚までの組織診・細胞診のガラス標本の連続撮影が可能

●画像管理ソフトウエアeSlide managerにより画像データ管理からセキュアーなコンサルテーションまで実現。iPadアプリにも対応。
●操作簡単な画像解析ツールもオプションで搭載可能



\_\_\_\_\_\_ 大容量円型回転式オートローダー







デジタル画像例 1



デジタル画像例 2



#### ライカマイクロシステムズ株式会社

本社 〒169-0075 東京都新宿区高田馬場1-29-9 Tel.03-6758-5690 Fax.03-5155-4337 大阪 Tel.06-6374-9770 / 名古屋 Tel.052-222-3939 / 福岡 Tel.092-282-9771 E-mail: Imc@leicabiosystems.com



# 患者さんのQuality of Lifeの 向上がテイジンの理念です。





汎用人工呼吸器(二相式気道陽圧ユニット) NIPネーザル。V

持続的自動気道陽圧ユニット スリープメイトS9

> 帝人ファーマ株式会社 帝人在宅医療株式会社 〒100-8585 東京都千代田区霞が関3丁目2番1号

健保適用



# <sup>あ</sup>す 明日の鼓動

### すこやかな鼓動のリズムを、 今日も、そして明日も。

メドトロニックは、 必要とされる治療を届けるために、 診断と治療の革新に挑戦し続けます。 また、将来に続く安心のために、 医療に携わる皆さまとともに トータルケアをサポートします。





条件付き 1.5&3T MRI対応 心臓植込み型デバイ<u>ス</u>

心臓植込み型デバイス患者さん の必要な診断機会を損なわない ために、すべてのSureScan<sup>®</sup> 製品の1.5&3Tフルスキャン化 を目指しています。



Pletter.

**日本メドトロニック株式会社** CRHF事業部 108-0075 東京都港区港南1-2-70







ホームページで中外製薬の企業・製品情報をご覧いただけます。 http://www.chugai-pharm.co.jp \_\_\_\_\_\_

### 第9回 呉国際医療フォーラム(K-INT)

### 協賛企業一覧

アイクレオ株式会社	大日本住友製薬株式会社
あすか製薬株式会社	大鵬薬品工業株式会社
アステラス製薬株式会社	武田薬品工業株式会社
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エーザイ株式会社	帝人在宅医療株式会社
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ジョンリン・エント・・ジョンリン株式会社	ライカマイクロシステムズ株式会社
第一三共株式会社	
	50 音順・2016 年 6 月 28 日

50 音順・2016 年 6 月 28 日現在





### 3D解析の性能を上げて、操作のハードルは下げる。Image

その先の「価値ある情報」を手に入れるために。富士フイルム独自の画像認識技術が、様々な部位の 高精度な自動抽出を可能にしました。臨床ニーズに応える多彩なアプリケーションは、あらゆる 操作が直感的でストレスフリー。進化し続ける3D解析だからこそ、多くの施設で選ばれています。

SYNAPSE VINCENT



販売名:富士画像診断ワークステーション FN-7941型 認証番号:22000BZX00238000



# Why Smart?

目と頭脳を持った全自動連続薄切装置が、 あなたの作業をかしこくサポートします。

#### ●インシデント対策の強化

検体の取違え防止 コンタミネーション防止

#### ●長期間にわたる標本生産能力の確保

人手不足の解消 切片品質の安定化

●薬効・薬理試験の効率化

試験と鏡検のスピードアップ 試験計画への柔軟な対応



