

DIALYSIS, RENAL TRANSPLANTATION, CLINICAL ENGINEERING, AND DIET THERAPY FOR DIABETES MELLITUS AND CHRONIC KIDNEY DISEASE

2017



Japanese Assistance Council of establishing Dialysis Specialists system in Cambodia







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DIALYSIS, RENAL TRANSPLANTATION, CLINICAL ENGINEERING, AND DIET THERAPY FOR DIABETES MELLITUS AND CHRONIC KIDNEY DISEASE

 \sim intensive seminar \sim

July 21 ~ 22, 2017
Phnom Penh, Cambodia

Japanese Assistance Council of establishing Dialysis Specialists system in Cambodia (JAC-DSC)

International University (IU), Phnom Penh, Cambodia

Supported by

International Society of Nephrology (ISN)

NGO Ubiquitous Blood Purification International (NGO UBPI)

Japanese Society for Technology of Blood Purification (JSTB)

President of the Japanese Assistance Council of Establishing Dialysis Specialist System in Cambodia (JAC-DSC)

Hideki Kawanishi, M.D., Ph.D.

Director, Kidney Center and Surgery, Tsuchiya General Hospital, Hiroshima, Japan
Clinical Professor, Faculty of Medicine, Hiroshima University, Hiroshima, Japan
Vice President, International Society of Blood Purification (ISBP) / Congress President of ISBP 2016
President, Japanese Society for Hemodiafiltration / Council Member, Japanese Society for Peritoneal Dialysis
Council Member, Japanese Society for Dialysis Access / Council Member, Japanese Society for Blood Purification in Critical Care
Steeling committee of PDOPPS / NGO Ubiquitous Blood Purification International, Yokohama, Japan
Guest Professor, International University, Phnom Penh, Cambodia



Dear Participants.

Congratulation for "the intensive seminar of Dialysis, Renal Transplantation, Clinical Engineering, and Diet Therapy for Diabetes Mellitus and Chronic Kidney Disease in Cambodia 2017". This seminar will be informed the important message for ESRD/CKD field in Cambodia and South East Asian countries.

The number of patients being treated for ESRD globally was estimated to be 3,200,000 at the end of 2013 and, with a 6% growth rate, continues to increase at a significantly higher rate than the world population. In particular, the remarkable increasing rate was shown in Asian countries. However, the access to treatment is still limited in many developing countries and a number of patients with terminal renal failure do not receive treatment. In order to save these patients, it is necessary to enhance the dialysis system, the educated staff and association of each countries. Japanese Assistance Council of Establishing Dialysis Specialist System in Cambodia (JAC-DSC) was organized the several education programs from 2015. Moreover, the Cambodia Association of Nephrology was stated at 2016 and approval by International Society of Nephrology (ISN). This is a great opportunity recognized worldwide for the Cambodian Nephrology Society. I hope that everyone will grow in the renal area with this educational program. We will expect to be built the cooperation between JAC-DSC and Cambodian Nephrology Team and younger generation.

//Introduction of lecturers//-

Vice President of the JAC-DSC

Toru Hyodo, M.D., Ph.D.



Director, Eijin Clinic and Kurata Hospital Dialysis Center, Hiratsuka, Japan
Associate Prof., Department of Urology, Kitasato University School of Medicine, Sagamihara, Japan
Secretary General, NGO Ubiquitous Blood Purification International (UBPI), Yokohama, Japan
Vice President, the Japanese Assistance Council of establishing Dialysis Specialists system in Cambodia (JAC-DSC), Tokyo, Japan
Guest Prof., Sen Sok International University Hospital, Cambodia-Japan Friendship Blood Purification Center, Phnom Penh, Cambodia
Honorary President of the Ho Chi Min City Society of the Dialysis Therapy, Vietnam
Honorary President of the Cambodian Association of Nephrology, Cambodia
ISN Oceania South East Asia Regional Board Member

Vice President of the JAC-DSC

Kenichi Kokubo, Ph.D.



Associate Professor, Kitasato University School of Allied Health Sciences, Sagamihara, Japan
Auditor Secretary, NGO Ubiquitous Blood Purification International, Yokohama, Japan
Chairman, Committee on International Affairs, Japanese Society for Technology of Blood Purification, Tokyo, Japan
Member, JSDT Committee to Support Young Doctors and Co-medical Staffs in Dialysis Fields in Developing Countries, Tokyo, Japan
Guest Professor, International University, Phnom Penh, Cambodia

///Introduction of lecturers//-

Secretary General of the JAC-DSC

Haruki Wakai, M.D.



President, Reiseikai Medical Corporation, Tokyo, Japan
Director, Shinagawa Garden Clinic, Tokyo, Japan
Assistant Director, Gotanda Garden Clinic, Tokyo, Japan
Council Member and Secretary, Japanese Society for Home Hemodialysis
Auditor Secretary, Japanese Society for Renal Nutrition
Director and Vice Secretary General, NGO Ubiquitous Blood Purification International, Yokohama, Japan
Guest Professor, International University, Phnom Penh, Cambodia

(Alphabetical order by last name)

Natsumi Abe, C.E.



Chief Clinical Engineer, Reiseikai Medical Corporation, Tokyo, Japan Medical Technologist

Ako Hanaoka, C.E.



Clinical Engineer,Osaka City University Hospital,Osaka,Japan Certified Dialysis Technician

Eiji Ishimura, M.D., Ph.D., FASN, FACP



Professor Department of Nephrology, Osaka City University Graduate School of Medicine, Osaka, Japan Deputy President Meijibashi Hospital

Minoru Ito, M.D., Ph.D.



Assistant Director, Department of Nephrology and Dialysis Center, Yabuki Hospital, Yamagata, Japan

Yukie Kitajima, R.D., Ph.D.



Associate Professor, Department of Medical Nutrition, Tokyo Healthcare University, Setagaya, Japan Dietitian, Reiseikai medical corporation shinagawa gardenclinic Dietitian, Eijin Clinic 2017 Congress President, Japanese Society for Renal Nutrition

Council Member, Japanese Society for Renal Nutrition Council Member, Japanese Society of Metabolism and Clinical Nutrition

Council Member, Japanese Society of Nutrition and Dietetics

Kozue Kobayashi, C.E., Ph.D.



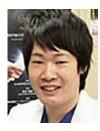
Assistant Professor, Kitasato University School of Allied Health Sciences, Sagamihara, Japan

Moe Kojima, C.E.



Tokai University Oiso Hospital, Kanagawa, Japan. Certified Dialysis Technician

Akihiro Kosoku, M.D.



Resident, Department of Urology, Osaka City University Graduate School of Medicine, Osaka, Japan

Hirokazu Matsubara, B.E.



Vice Secretary General of the JAC-DSC

Managing Director, TUC (Tanaka Urology Clinic Group) Japan Dialysis Center, Osaka, Japan
Vice President, TUC Vietnam
Vice Secretary General, NGO Ubiquitous Blood Purification International, Yokohama, Japan
Bachelor of Engineering in Computer Science

Toshihide Naganuma, M.D., Ph.D.



Lecturer, Department of Urology, Osaka City University Graduate School of Medicine, Osaka, Japan Guest Professor, International University, Phnom Penh, Cambodia

Hyogo Nakakura, M.D., Ph.D.



Chief Director of Department of Hemodialysis and Apheresis of Arisawa General Hospital

Tomotaka Naramura, C.E., Ph.D.



Associate Professor, Faculty of Madical Science, University of East Asia, Yamaguchi, Japan Director, Clinical Engineering Global Promotion Foundation
Council Member, Japan Association for Clinical Engineers (JACE)
Council Member, Japanese Society for Technology of Blood Purification (JSTB)
Guest Professor, International University, Phnom Penh, Cambodia

Mizuki Ohara, C.E.



Clinical Engineer, Reiseikai Medical Corporation, Tokyo, Japan

Kana Suzuki, C.E.



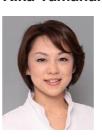
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Junji Uchida, M.D., Ph.D.



Associate professor, Department of Urology, Osaka City University Graduate School of Medicine, Osaka, Japan.
Council Member, Japanese Society of Transplantation
Council Member, Osaka Medical Association
Academic Chairman, Osaka Society of Clinical Urology

Rika Yamanaka, B.A.



Assistant Secretary of the JAC-DSC Director and Office Manager, Reiseikai Medical Corporation, Tokyo, Japan Certified Financial Planner Bachelor of Arts in English

Tsuyoshi Yamaura, C.E.



Clinical Engineer, Reiseikai Medical Corporation, Tokyo, Japan

(Alphabetical order by last name)

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The intensive seminar of Dialysis, Renal Transplantation, Clinical Engineering, and Diet Therapy for Diabetes Mellitus and Chronic Kidney Disease 2017 Preliminary Program

Date: July 21-22, 2017

Venue: International University, Building 89-91-93 & 95, St.1011-1984, Sangkat Phnom Penh Thmey, Khan Sen Sok, Phnom Penh, Cambodia

Day-1: July 21, Fri., 2017 General Chair of Day-1: Toru Hyodo and Toshihide Naganuma

8:25	Opening Remarks by Hideki Kawanishi, President of the Japanese Assistance Council of Establishing Dialysis Specialist System in Cambodia (JAC-DSC) and Sovandy Chan, Vice President of Cambodian Association of Nephrology.
8:30-9:00	HD as Renal Replacement Therapy by Akihiro Kosoku
9:00-9:40	Standard procedure for arteriovenous fistula and superficialization by Toshihide Naganuma
9:40-10:20	Kidney Transplantation as Renal Replacement Therapy by Junji Uchida
10:20-10:30	Break
10:30-11:10	PD as Renal Replacement Therapy by Hideki Kawanishi
11:10-11:50	AKI by Hideki Kawanishi
11:50-12:30	Pediatric Nephrology and ESRD by Hyogo Nakakura
12:30-13:30	Lunch
13:30-14:10	Renal Anemia by Minoru Ito
14:10-14:50	Nutrition of Dialysis Patients by Minoru Ito
14:50-15:30	Diet Therapy for Dialysis Patients by Yukie Kitajima
15:30-15:40	Break
15:40-16:20	Carbohydrate Counting for CKD Diabetic Patients by Toru Hyodo
16:20-17:00	Home Hemodialysis by Haruki Wakai and Natsumi Abe

17:00- 17:30	Health Insurance Systems in Japan by Rika Yamanaka
17:30-18:00	The Present Status and History of ESRD Care in Cambodia by Toru Hyodo

Day-2: July 22, Sat., 2017 General Chair of Day-2: Kenichi Kokubo and Haruki Wakai

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8:30-9:00	CKD-MBD by Hideki Kawanishi
9:00-9:30	The Practical Working Flow in Dialysis Rooms by Mizuki Ohara, Tsuyoshi Yamaura, and Kana Suzuki
9:30-10:00	What is Hemodialysis Practice to Patients by Moe Kojima
10:00-10:30	Dialysis fluid Purification by Tomotaka Naramura
10:30-10:40	Break
10:40-11:10	Medical Check for Vascular Access by Ako Hanaoka
11:10-11:40	Infectious Control in Dialysis Room by Hirokazu Matsubara
11:40-12:10	Maintenance of Dialysis Machines by Kozue Kobayashi and Kenichi Kokubo
12:10-13:10	Lunch
13:10-14:10	Current status of the treatment of predialysis patients with chronic kidney disease, in the World, in Japan, and in Cambodia. Special emphasis of non-diabetic and diabetic CKD by Eiji Ishimura
14:10-14:30	Introduction of Dialysis Products by Kimihiko Nakamura of Nipro Corporation, Japan
14:30-15:30	Comprehensive Examination (The Final Test)
16:00-16:30	Closing Ceremony 1: The announcement of the excellent participants who can get donated text books

Chan, Vice President of Cambodian Association of Nephrology.

3: Closing Remarks by Hideki Kawanishi, President of JAC-DSC and Sovandy

Frontier 2018, in January and February 2018.

2: The announcement of the most excellent 2 participants who will be able to visit Japan in order to study "Dialysis, Renal Transplantation, Clinical Engineering, and Diet Therapy for Diabetes Mellitus and Chronic Kidney Disease" for 7 days and ISN

HD as Renal Replacement Therapy

Akihiro Kosoku, M.D.

The kidney plays several vital roles in maintaining the health. Chronic kidney disease(CKD) causes to lose the kidney function over time. The final stage of CKD is end-stage kidney disease(ESKD). The kidney function of people with ESKD is too decreasing below 10 percent of the kidney normal ability to maintain their lives. Therefore, people with ESKD need to have renal replacement therapy. There are roughly three types of renal replacement therapy; kidney transplantation, peritoneal dialysis, and hemodialysis. In this lecture, the general outline of renal replacement therapy including hemodialysis will be discussed.

Standard procedure for arteriovenous fistula and superficialization

Toshihide Naganuma, M.D., Ph.D.

Vascular access is an essential component of hemodialysis treatment. I would like show you a video of the typical arteriovenous fistula (AVF) and superficialization creation procedure at our hospital. The video of vascular access will be distributed after my lecture.

Kidney Transplantation as Renal Replacement Therapy

Junji Uchida, M.D., Ph.D.

Cardiovascular morality rate for patients receiving maintenance dialysis is between 10-20 times that of the general population. After successful kidney transplantation, cardiovascular morality is reduced despite use of immunosuppressive therapy. Transplantation improves the cumulative survival of end-stage renal disease patients compared with dialysis. Furthermore, kidney transplantation has improved quality of life compared with dialysis.

Kidney transplantation is the preferred treatment for end-stage renal disease, because it has been found to be associated with greater longevity and better quality of life compared with dialysis.

Due to the severe shortage of deceased donors in Japan, ABO-incompatible living donor kidney transplantation has been performed since the late 1980s. Excellent long-term outcomes have been achieved, and the rates of graft survival in these patients are currently similar to those in recipients of ABO-compatible grafts.

In this lecture, surgical procedure of kidney transplantation, comparison between kidney transplantation and dialysis, immunosuppressive therapy, outcomes, and ABO-incompatible kidney transplantation will be discussed.

PD as Renal Replacement Therapy

Hideki Kawanishi, M.D., Ph.D.

Peritoneal dialysis has been applied as a self-care and home-based procedure for patients with ESRD and has contributed to restoring and maintaining patients' social and family lives. In this lecture, peritoneal dialysis theory, devices, systems, and use in the clinical setting will be discussed.

AKI

Hideki Kawanishi, M.D., Ph.D.

Acute kidney injury (AKI) is an abrupt loss of kidney function that develops within 7 days. Generally it occurs because of damage to the kidney tissue caused by decreased kidney blood flow from any cause, exposure to substances harmful to the kidney, an inflammatory process in the kidney, or an obstruction of the urinary tract. In this lecture, we will discuss the mechanism and management of AKI.

Pediatric Nephrology and ESRD

Hyogo Nakakura, M.D., Ph.D.

Renal failure in children is a rare disease, but treatment is necessary.

And our treatment goal is to nurture the physical and mental health of these children to a level equal to that of healthy children.

I will outline about renal failure in children.

Renal Anemia

Minoru Ito, M.D., Ph.D.

Anemia is a common feature of CKD associated with reduced quality of life and increased cardiovascular disease, hospitalizations, cognitive impairment, and mortality. Predominant causes of anemia in CKD are erythropoietin deficiency and iron deficiency. The recombinant human erythropoietin and other erythropoiesis-stimulating agents greatly benefited patients by improving their symptoms.

In this lecture, we will discuss the mechanism and management of anemia in CKD.

Nutrition of Dialysis Patients

Minoru Ito, M.D., Ph.D.

Nutritional problems in CKD patients are complicated, and its causes are multifactorial. Malnutrition, Inflammation, and Atherosclerosis affect the nutrition of CKD patients. In this lecture, we will focus on the special features of nutrition of dialysis patients.

Diet Therapy for Dialysis Patients

Yukie Kitajima, R.D., Ph.D.

The purpose of diet therapy is to avoid malnutrition and prevent the progression of various hemodialysis related complications. The basics of the dialysis diet are as follows:

- 1. Control of salt and water intake
- 2. Appropriate energy intake
- 3. Control of potassium intake
- 4. Appropriate protein intake
- 5. Control of phosphorus intake

It is most important for dialysis patients to restrict salt. This lecture will focus on ways to control water intake, ensure adequate energy and potassium intake in dialysis patients. Increased concentration of potassium in the blood can strain on the heart. This lecture will cover foods high in potassium and cooking methods to reduce potassium content with specific examples. In addition, I will lecture how to intake protein and phosphorus. Hyperphosphatemia is a risk factor for cardiovascular disease and is associated with the development of secondary hyperparathyroidism and ectopic calcification. Potassium and Phosphorus is a nutrient contained in many foods. It is important for CKD patients to monitor their daily dietary phosphorus intake. Dietary habit in Japan is different from that in Cambodia. Together let's think about what foods and dishes in Cambodia have high and low contents of potassium and phosphorus.

Carbohydrate Counting for CKD Diabetic Patients

Toru Hyodo, M.D., Ph.D.

Diabetes is the main cause of dialysis induction in many countries. In many developed countries, diabetesand CKD are managed individually by an endocrinologist and nephrologist, respectively. However, dialysis specialists must act as both endocrinologist and nephrologist when treating diabetic CKD patients. Thus, dialysis treatment in such patients has been difficult. Blood sugar control is very important in diabetic dialysis patients; however, an effective diet therapy has not been proved. Recently, carbohydrate counting has been shown to be a powerful method to control blood sugar in diabetic dialysis patients. In this lecture, the carbohydrate counting will be described as the diet therapy for CKD diabetic patients.

Home Hemodialysis

Haruki Wakai, M.D. / Natsumi Abe, C.E.

HHD is a treatment option that allows patients to perform hemodialysis at home under the supervision of physicians. A hemodialysis machine is installed in the home, and the patient performs hemodialysis by manually assembling the circuit, performing shunt puncture, monitoring his/her condition during dialysis, and retransfusion.

HHD has various benefits. It allows dialysis to be performed at home at any time, and the biggest benefit is that it is possible to dialyze a large volume of blood, which is known to yield a good prognosis. Dialysis should be performed gradually over time. It can loosen food restriction, improve nutrition, and help physical conditioning. Since it can be performed at home at any time, it allows a large volume of blood to be dialyzed more easily. Outpatient dialysis is provided up to fourteen times a month in principle, while HHD can be performed every day or every other day. When the number of dialysis days is increased, adequate dialysis can be provided "more frequently", which helps in stabilizing the physical condition of the patient.

In this lecture, we introduce general matters of HHD, examples of present HHD and examples of HHD introduction in foreign countries.

Health Insurance Systems in Japan

Rika Yamanaka, B.A.

Dialysis treatment is an expensive treatment, and the cost of providing dialysis treatment to many patients is a global issue.

This lecture will introduce the Japanese health insurance system and examine the financial issues associated with dialysis treatment.

The Present Status and History of ESRD Care in Cambodia

Toru Hyodo, M.D., Ph.D.

Hemodialysis (HD) started at Calmette Hospital with 4 dialysis machines in 1997 in Cambodia. The machines were updated to 26 machines until 2011. In 2015, there were 191 patients from every part of the country. 1995 sessions of hemodialysis were served in 2015. As for peritoneal dialysis, it was introduced to 3 acute renal failure patients as the pilot therapy supported by International Society of Nephrology.

On the other hand, the dialysis center in Ketmealea Hospital was established in 2007, Health Science Institute Hospital in 2008, Sen Sok International University Hospital in 2010, Kossamak Hospital in 2016. The 10 dialysis centers in total have been opened until 2017. Until now, the number of HD patients has reached to around 500. However, there are no health insurance systems and the cost of HD must be covered by patients themselves.

In 2016, the Cambodian Association of Nephrology was established and the first annual scientific meeting was held on 26th November. This association is made of 14 nephrologists or dialysians. More than 200 young medical students and doctors attended to this meeting. Two Cambodian and 2 Japanese professors gave the lectures.

CKD-MBD

Hideki Kawanishi, M.D., Ph.D.

Mineral and bone disorder is a major complication in patients with CKD, particularly those undergoing dialysis, and is a problem that has yet to be conquered. In this lecture, the role of parathyroid hormone, phosphorus, and calcium in CKD and international guidelines for the treatment of CKD-MBD will be introduced.

The Practical Working Flow in Dialysis Rooms

Mizuki Ohara, C.E. / Tsuyoshi Yamaura, C.E. / Kana Suzuki, C.E.

Dialysis therapy requires the cooperation of many medical professionals. Nurses and clinical engineers perform most of the daily practical work. In this lecture, the practical working flow at a standard dialysis room in Japan will be explained through the use of video footage. This virtual experience will allow you to familiarize yourself with dialysis treatment.

What is Hemodialysis Practice to Patients

Moe Kojima, C.E.

Extracorporeal circulation was established along with the development of dialysis therapy and enables us to modify blood component taken out from the body, i.e., to remove uremic toxins from the blood and to correct electrolyte concentration and pH of the blood. Extracorporeal circulation requires an appropriate amount of anticoagulant and a sterilized extracorporeal circuit. Extracorporeal circulation should be properly controlled by the dialysis machine by monitoring fluid removal rate, temperature, dialysis fluid concentration, and blood pressure. In this lecture, items necessary for hemodialysis practice will be explained.

Dialysis fluid Purification

Tomotaka Naramura, C.E., Ph.D.

Quality assurance of dialysis fluid purification is a vital component of dialysis treatment. Toll-like receptor mediated cytokine production can result from bacterial endotoxin contamination of dialysis fluid during dialysis treatment. Both scheduled and random water quality testing need to be performed in conjunction with equipment maintenance, such as the evaluation of the endotoxin retentive filter and daily inspection of the reverse osmotic distribution network for quality conformity. This lecture will cover quality assurance methods and problems faced during the dialysis fluid production process.

Medical Check for Vascular Access

Ako Hanaoka, C.E.

Vascular access (VA) is used in every treatment and is an essential component in dialysis therapy. Daily management by the patient and the medical staff is important because the function of VA changes depending on the state of puncture and hemostasis at the previous treatment. In this lecture, VA management including basic knowledge of VA puncture, monitoring and surveillance of VA, detection of stenosis and VA recirculation will be explained.

Infectious Control in Dialysis Room

Hirokazu Matsubara, B.E.

In the dialysis room, infection can be transmitted from patient to patient through contact with medical equipment and/or medical staff. The standard precautions provided by the Center for Disease Control and Prevention can be applied for infection control and prevention in the dialysis room. This lecture will cover the standard operating procedure for dialysis therapy and practical methods of infection prevention in the dialysis room.

Maintenance of Dialysis Machines

Kozue Kobayashi, C.E., Ph.D. / Kenichi Kokubo, Ph.D.

Dialysis equipment should work correctly. Lack of consistency between dialysate inflow and dialysate outflow and fluid removal and improper control of dialysate concentration will directly result in a life threatening event. Inspection of dialysis equipment before, during, and after use is a very important task for medical staff (the dialysis machine also provides some automated inspection). Scheduled maintenance and inspection should also be performed every 6 months. In this lecture, the basic concept and practice of dialysis equipment maintenance and inspection will be explained.

Current status of the treatment of predialysis patients with chronic kidney disease, in the World, in Japan, and in Cambodia. Special emphasis of non-diabetic and diabetic CKD

Eiji Ishimura, M.D., Ph.D., FASN, FACP

Currently, there are approximately 1,700,000 dialysis patients in the whole world, and approximately 320,000 dialysis patients in Japan, and "***" patients in Cambodia; "***"?, actually, I do not know the exact number of the dialysis patients in Cambodia. In Cambodia, I have heard that dialysis treatment has just started, recently. In the developing countries, such as South East Asian countries including Vietnam, Thailand, and Indonesia, the number of dialysis patients are growing and growing. It is very, very important to develop dialysis treatment in most of the developing countries, including Cambodia, to save the life of patients with chronic kidney disease (CKD), of course; however, more important clinical strategy of the treatment of CKD is to prevent the emergence of CKD, to treat the CKD, and to prevent the progression of CKD, and to somehow avoid the introduction of dialysis treatment in CKD patients. This clinical strategy to block the CKD, cure the CKD, and to prevent the initiation of chronic dialysis therapy is the basic, fundamental goal of clinicians, particularly for most of nephrologists, not only in the whole world and in Japan, but also in Cambodia.

Recently, not only developed countries such as US, Europe, Korea, and Japan, but also in developing counties such as Vietnam, Indonesia, and Philippine, the number of diabetic CKD patients is rapidly increasing and increasing. The most common cause of end-stage kidney disease (ESKD) is diabetes mellitus (DM) in the whole world, in Japan, in Korea, and in China, and, I suppose, in South East Asia countries, including Cambodia.

Another recent important progress in CKD treatments, not only in diabetic patients but also in non-diabetic patients, is that several useful tools for the treatment of CKD are now available in most of the countries with relatively low price. These includes; very effective anti-hypertensive medicines to prevent the progression of CKD; particularly renin-angiotenin-system blockers (angiotensin receptor blockers (ARB) and angiotensin converting enzyme blockers(ACEi)) and very effective and long-acting calcium channel blockers (CCBs); many anti-diabetic medicines, both several kinds of insulin, incretin-related medicines, and useful oral anti-diabetic drugs; long-acting erythrocyte stimulating agents (ESA); several phosphate binders that can be prescribed in predialysis CKD patients to prevent CKD-mineral bone disease (CKD-MBD); and so on.

In my lecture, I would like to have a talk on recent progress in the treatment of predialysis CKD patients, both diabetic and non-diabetic patients; in order to prevent the increase of dialysis patients, and also to save the life of predialysis CKD patients. I would like to shows the current treatment strategy of predialysis CKD patients in the World and in Japan. I would like to stress the clinical strategy as a Nephrologist, to prevent the increase of dialysis patients in Cambodia, and also to save the life of predialysis CKD patients in Cambodia.

Introduction of devices related to dialysis

Kimihiko Nakamura Nipro Corporation, Japan Chief Products Sales and Development, Domestic Division

Session 1: Nipro Corporation Company Profile, Dialysis Machine, and Needle Removal Detector

In the first session, we will provide an overview of the Nipro Corporation company profile and the company's dialysis machine and needle removal detectors. Using video and PowerPoint presentations, we will show how our dialysis machine allows for precise water removal and the new functions available on our latest machine. In addition, you will be allowed hands-on access to compare older and newer needle removal detectors during the "Touch and Use" section of the session.

Session 2, Dialyzer, Needle, and Buttonhole Kit

In the second session, we will introduce Nipro dialyzers and needles. In the

"Touch and Use" section of the session, you will have hands-on access to Nipro needles including their clamps, safety mechanisms, and check valves. Moreover, we will show you the Nipro Buttonhole Kit and Dull Arteriovenous Fistula Needle.



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18/F Canadia Tower, No.315, Ang Doung St, Corner Monivong Blvd, Phnom Penh, Cambodia http://www.reiseikai-media.org/index-e.html



Schedule

July 21 ~ 22, 2017

Place

International University (IU):

Building 89-91-93 & 95, St.1011-1984, Sangkat Phnom Penh Thmey, Khan Sen Sok, Phnom Penh, Cambodia Tel: (855) 23 881-623, H/P: 099 899 069, 016 203 040

Email: info@iu.edu.kh Website: www.iu.edu.kh

Seminar program

The program (time schedule) is publicized on the following website:

http://www.cambodia-dialysis.com/

Privilege for participants

- JAS-DSC will issue a certificate of seminar completion to participants with an attendance rate of 60% or higher who achieve the specified score or higher on the final test.
- An English textbook on dialysis etc. will be given to participants with an attendance rate of 60% or higher who rank among the top 10 based on the final test score.



- One or two particularly excellent participants who satisfy all of the following criteria will be invited to attend a 7-day training course in Japan.
 - 1. A participant with an attendance rate of 60% or higher and an excellent final test score.
 - 2. A participant who is highly motivated and qualified to become a dialysis healthcare professional.
 - 3. A participant with a certain level or higher English skills.
 - 4. A participant who is courteous and follows the rules.
 - 5. A participant who is in good health and without infectious disease.
 - 6. A participant who wishes to participate in the training in Japan and can obtain family consent.
 - 7. A participant who can obtain a passport.
- * Selection will be made by the JAC-DSC. Objections to the selection results will not be allowed.
- * The training will take place in or near Tokyo, Japan, in January and Feburaly 2018. The participants will receive practical training at several medical institutions and universities. They can join a tour of Tokyo as an extracurricular activity.
- * The JAC-DSC or JSTB will pay for the following training expenses: airfare, hotel, travel insurance, transfer fee, Cambodia International Airport tax, and reference materials.

How to apply

Please make contact with "International University, Cambodia" directly or e-mail your information to info@reiseikai-media.org

Please write, your name, age, female/male, e-mail address, phone number, occupation, institute and department that you belong to (university, school, hospital, clinic, corporation, etc.), in your e-mail. Your e-mail will be forwarded to both of JAC-DSC staff and IU staff automatically.

*Participants need to pay "10 USD" to cover venue preparation costs.













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