第2回　日韓透析医療勉強・交流会

The 2nd Showakai-Kyung Hee University Hemodialysis Symposium

開催日：2016年10月1日（土）10：00～16：00
場　　所：（医）松和会　望星西新宿診療所　5階会議室
演　　題：血液透析療法に関する基礎・臨床研究
主　　催：（医）松和会、同アジア太平洋腎研究推進室
発表者：医師、看護師、管理栄養士、臨床工学技士

医療法人社団松和会および同アジア太平洋腎研究推進室では、第２回松和会・キョンヒ大学透析療法シンポジウムを開催いたしました。

本シンポジウムの目的は、かねてから親交のある韓国キョンヒ大学腎臓内科グループと血液透析の現状や今後の課題について意見交換を行うことと、相互の親睦を一層深めることにあります。

今回は、キョンヒ大学腎臓内科から医師と看護師等合わせて１５名、松和会グループから医師、看護師、管理栄養士、臨床工学技士、事務職員合わせて４８名（計６３名）の参加があり、活発な討論がなされました。

キョンヒ大学からは、２０１５年５月に経験されたコロナウイルスによるMERS(Middle East Respiratory Syndrome)患者への対応の厳しさが発表され、重篤な感染症に対する備えの重要性を再認識しました。

松和会からは、韓国にはない職種の臨床工学技士の果たす大きな役割が発表され、キョンヒ大学から多くの質問がなされました。また、透析患者さんの運動・栄養の重要性についての看護師・管理栄養士から発表は、日常臨床に関わる問題であるだけに、医療スタッフだけでなく多くの事務職員からも質問が寄せられました。
大変実り多いシンポジウムであったと思っています。

シンポジウム終了後近隣のホテルで懇親会が行われ、楽しいひと時を過ごしました。

（文責：（医）松和会アジア太平洋腎研究推進室長　富野康日己）

2nd Showakai – Kyung Hee University Hemodialysis Symposium

Date: October 1 (Saturday) 10:00-16:00
Place: SHOWAKAI Nishishinjuku Shinryosyo, Conference Room, Tokyo, Japan

9:30～10:00	Reception	
10:00～10:30	Opening Remarks	Kiyoshi Kurokawa Myung Jae Kim
	Chair: Sang Ho Lee & Yasuhiko Tomino	
10:30～11:00	『Multicenter Cohort Study in Patients with End Stage Renal Disease on Hemodialysis.』	Jin Sug Kim
11:00～11:30	『The Current Situation of the Work of Clinical Engineers and Blood Filtration Dialysis in Our Group.』	Masafumi Fujiya
11:30～12:00	『Japanese clinical guideline for ADPKD patients and a case report on this disease after the use of tolvaptan in our hospital. 』	Tomonari Watanabe
12:00～13:30	Lunch&Tour the Hemodialysis Center	
	Chair: Yong Hoon Kim & Mitsumine Fukui	
13:30～14:00	『Experience of outbreak of MERS in Kyung Hee University Hospital at Gangdong.』	Sang Ho Lee
14:00～14:30	『 Dialysis treatment after the exposure of MERS virus infection in hemodialysis unit.』	Ho Soek Kim
	Chair: Myung Hee Hwang & Mitsugu Yoneyama	
14:30～15:00	『A case analysis of the effect of exercise programs in patients with orthostatic hypotension.』	Miyuki Akiyama
15:00～15:30	『Characteristics of Japanese Food and Strategies for Salt Reduction – Salt Reduction Advice for Dialysis Patients.』	Akiko Uenaka
	『Working Process Improvement by Making an Education Video for Hemodialysis Patients.』	Ki Seon Lee
16:00～	Closing Remarks	Yasuhiko Tomino Sang Ho Lee
17:30～	Party	

2nd Showakai – Kyung Hee University Hemodialysis Symposium

Date: October 1 (Saturday) 10:00-16:00

Place: SHOWAKAI Nishishinjuku Shinryosyo, Conference Room, Tokyo, Japan

10:00–10:30 Opening Remarks

Prof. Kiyoshi Kurokawa, Medical Corporation SHOWAKAI, Tokyo, Japan

Prof. Myung Jae Kim, Kyung Hee University, Seoul, Korea

Part 1: Chair: Sang Ho Lee & Yasuhiko Tomino

10:30–11:00

1. Multicenter Cohort Study in Patients with End Stage Renal Disease on Hemodialysis
   Jin Sug Kim (*Kyung Hee University Medical Center, Seoul, Korea*)

11:00–11:30

2. The Current Situation of the Work of Clinical Engineers and Blood Filtration Dialysis in Our Group
   Masafumi Fujiya (*Kita Hachioji Clinic*)
   Junichi Ogiwara (*Bosei Shinjuku Minamiguchi Clinic*)
   Association of Clinical Engineers, Medical Corporation Showakai, Tokyo, Japan

11:30–12:00

3. Japanese clinical guideline for ADPKD patients and a case report on this disease after the use of tolvaptan in our hospital
   Tomonari Watanabe, Takuto Seki, Atsuko Hisada and Reo Kanda
   (*Division of Nephrology, Ikegami General Hospital, Tokyo, Japan*)

12:00–13:30 Lunch & Tour the Hemodialysis Center

Part 2: Chair: Yeong Hoon Kim & Mitsumine Fukui

13:30–14:00

4. Experience of outbreak of MERS in Kyung Hee University Hospital at Gangdong
   Sang Ho Lee (*Kyung Hee University Hospital at Gangdong, Seoul, Korea*)

14:00–14:30

5. Dialysis treatment after the exposure of MERS virus infection in hemodialysis unit
   Ho Soek Kim (*Kyung Hee University Hospital at Gangdong, Seoul, Korea*)

Part 3: Chair: Myung Hee Hwang & Mitsugu Yoneyama

14:30–15:00

6. A case analysis of the effect of exercise programs in patients with orthostatic hypotension
   Miyuki Akiyama, Hiromi Nanba, Yumi Komuro, Mayumi Ishiguro and Keiko Matsuo
   (*Bosei Fujisawa Clinic, Kanagawa, Japan*)

15:00–15:30

7. Characteristics of Japanese Food and Strategies for Salt Reduction – Salt Reduction Advice for Dialysis Patients
   Akiko Uenaka (*Bosei Kannai Clinic, Kanagawa, Japan*)
   Dietitian Subcommittee of Showakai Group, Tokyo, Japan

15:30–16:00

8. Working Process Improvement by Making an Education Video for Hemodialysis Patients
   Ki Seon Lee (*Kyung Hee University Medical Center, Seoul, Korea*)

16:00 Closing Remarks

Drs. Yasuhiko Tomino & Sang Ho Lee

Abstract

Part 1: Chair: Sang Ho Lee & Yasuhiko Tomino
10:30–11:00

1. Multicenter Cohort Study in Patients with End Stage Renal Disease on Hemodialysis

Jin Sug Kim

Kyung Hee University Medical Center, Seoul, Korea

Patients with end stage renal disease (ESRD) on hemodialysis show poor clinical outcomes as compared to general population. Although there are many established risk factors for clinical outcome in general population, these factors sometimes reveal markedly different or opposite predictive patterns in patients with ESRD. Hence, necessity of new risk factors for patients with ESRD has arisen. The purpose of multicenter cohort is to identify new parameters for the prediction of clinical outcomes in patients with ESRD on hemodialysis. Here we describe design, methods and introduce the website of our multicenter cohort study.

11:00–11:30

2. The Current Situation of the Work of Clinical Engineers and Blood Filtration Dialysis in Our Group

Masafumi Fujiya[1] and Junichi Ogiwara[2]

[1] *Kita Hachioji Clinic*

[2] *Bosei Shinjuku Minamiguchi Clinic*

Association of Clinical Engineers, Medical Corporation Showakai, Tokyo, Japan

'Clinical Engineer' is a specialized medical occupation and national qualification introduced in 1987, and we as clinical engineers work closely with doctors, nurses and other medical technicians to work in the clinical area, involving inserting needles, operating equipment and managing data, as well as maintenance and servicing including water quality management, purification of dialysate and maintaining medical devices.

Our group currently has 263 clinical engineers. We established the 'Showakai Association of Clinical Engineers' as well as setting up the Water Quality Management Committee, the Monitoring Committee and the Accident Prevention Committee. This enables us to work on a daily basis towards the improvement of dialysis medicine, through the exchange of information between facilities, the sharing of information, and the communication of information to Japan as a whole.

One of the most important tasks of a clinical engineer as part of blood purification is not only the maintenance of the various devices but the purification of the dialysate. High performance dialyzers and On-Line HDF have been introduced to clinical settings, and with the risk of contaminants moving from the dialysis fluid side to the blood side due to reverse filtration and reverse diffusion, the purification of dialysate is required, however at the Showakai Association of Clinical Engineers, we began purifying dialysate at an early stage, with all of our group's facilities working on the purification of dialysate so that we can reliably provide dialysate at a high standard.

At this symposium we will discuss the current situation of cleaning and sterilization methods for the purification of dialysate with the main system used in Japan – the Central Dialysis Fluid Delivery System (CDDS) – and present the results of endotoxin (ET) and bacterial test measurement concentrations from the facilities of our group. In addition we will also report on the latest with On-Line HDF (which can be used with the purification of dialysate) and the original Japan alternative, I-HDF (intermittent hydration type).

11:30−12:00

3. Japanese clinical guideline for ADPKD patients and a case report on this disease after the use of tolvaptan in our hospital

Tomonari Watanabe, Takuto Seki, Atsuko Hisada and Reo Kanda

Division of Nephrology, Ikegami General Hospital, Tokyo, Japan

Autosomal dominant polycystic kidney disease (ADPKD) is the most common hereditary cystic kidney disease in Japan. ADPKD is characterized by the progressive development of fluid-filled cysts derived from renal tubular epithelial cells and that of complications in several organs such as the liver, brain and intestine. Furthermore, end-stage kidney disease (ESKD) requiring renal replacement therapy occurs in approximately 50% of ADPKD patients by the age of 60 years in Japan. ADPKD was stated as the 4th causal disease of ESKD in a 2014 JSDT report. Although there have been no specific and efficacious treatments for ADPKD, the use of tolvaptan has been permitted under the national insurance scheme from 2014 in Japan. Tolvaptan, a V2-receptor antagonist, selectively blocks the binding of vasopressin to V2-receptors and inhibits the production of cAMP. The results of the TEMPO3:4 trial including Japan demonstrated that tolvaptan, when given over a period of 3 years, slows the increase in total kidney volume and the decline in kidney function in patients with ADPKD. Due to particular attention to serious adverse events such as drug-induced liver injury and dilutional hyponatremia, a tolvaptan treatment is only recommend for ADPKD patients with relatively-good renal function and a total kidney volume of 750 ml or more. Today, we would like to introduce a Japanese clinical guideline for ADPKD patients and report on a case of an ADPKD patient using tolvaptan in our hospital, which based on an MRI, showed total kidney volume significantly decreased 6 months after tolvaptan administration.

12:00−13:30 Lunch & Tour the Hemodialysis Center

Part 2: Chair: Yeong Hoon Kim & Mitsumine Fukui
13:30–14:00

4. Experience of outbreak of MERS in Kyung Hee University Hospital at Gangdong

Sang Ho Lee
Kyung Hee University Hospital at Gangdong, Seoul, Korea

In May 2015, a Korean was diagnosed with Middle East Respiratory Syndrome (MERS) coronavirus infection after travel to the Middle East. Within a month, there was the largest outbreak outside the Middle East with 186 laboratory confirmed MERS-CoV infections resulting in 36 deaths. There were few cases of MERS-CoV infection in chronic hemodialysis center. We experienced a case of MERS in hemodialysis unit and subsequent 92 dialysis patients and 13 medical staffs to be isolated. Here we summarized our experience to overcome the sudden happened, unexpected disaster in dialysis unit.

14:00–14:30

5. Dialysis treatment after the exposure of MERS virus infection in hemodialysis unit

Ho Soek Kim
Kyung Hee University Hospital at Gangdong, Seul, Korea

During MERS outbreak, one hemodialysis patient in our hospital was confirmed to have MERS-CoV infection. A significant proportion of hemodialysis patients should be isolated because of close contact with infected patient in dialysis unit. At the same time, hemodialysis patients had to be graded and managed differently according to the degree of exposure, to minimize the risk of patient-to-patient transmission. Here we describe the precaution measures, hemodialysis methods and the outcomes of the contacted patients and medical staffs in our dialysis center.

Part 3: Chair: Myung Hee Hwang & Mitsugu Yoneyama
14:30–15:00

6. A case analysis of the effect of exercise programs in patients with orthostatic hypotension

Miyuki Akiyama, Hiromi Nanba, Yumi Komuro, Mayumi Ishiguro and Keiko Matsuo
Bosei Fujisawa Clinic, Kanagawa, Japan

I. Introduction

Ms. A, an elderly dialysis patient with decreased ADL and QOL, following repeated falls as a result of orthostatic hypotension, said 'I want to go shopping at my own pace, and live just that little big longer'. We thought that with a simple exercise regime, patients could potentially avoid falls and we could support them in being more positive.

II. Research objective

By creating an exercise program for Ms. A, it became clear that falls were prevented and ADL/QOL was either maintained or improved with the patient's positive thinking supported.

III. Research method

(1) Patient details: The patient was Ms. A, age 81, female, 19 years of dialysis.

(2) Previous history: Pulmonary infarction 22 years ago, hemodialysis commenced 19 years go, and in the same year an IVC filter was inserted for deep vein thrombosis in the lower limbs.

Sixteen years ago she had sick sinus syndrome (permanent pacemaker inserted), and ten years ago dizziness developed, resulting in 1 or 2 falls per year.

History of present illness: From 2012, vasodilatation was being conducted every 1–2 months due to artificial angiostenosis.

(3) Data collection method and analysis method: 17 types of exercises were performed at the bedside for about 15 minutes, prior to dialysis, three times per week. Details of the exercises were entered into an assessment table that we created. Using a Japanese version of a Subjective Exercises Experience Scale (SEES-J), we assessed the psychological effect (fatigue factor, psychological stress factor, positive wellbeing factor).

IV. Results

The patient participated actively each time, doing the exercises each time without missing a session until the fifth week. Values for fatigue factor and psychological stress factor remained low. The positive wellbeing factor was also high until the fifth week. In the sixth week, shunt trouble caused fatigue and psychological stress factors to show high values, and positivity dropped significantly. Since starting the exercises, to date we have been able to achieve results of no dizziness due to orthostatic hypotension, and no falls. The patient commented positively – that 'Since beginning my exercises it has all been good. The feeling of wanting to walk has continued and I have been able to do the exercises and try harder.

V. Discussion

We were unable to get significantly close to Ms. A's aim of 'walking to the shops', however since starting the exercises there has been no dizziness and no falls, and given that she gave positive comments about the exercise program, we believe that it has been a success. It will be necessary to continue the program hereafter.

15:00–15:30

7. Characteristics of Japanese Food and Strategies for Salt Reduction – Salt Reduction Advice for Dialysis Patients

Akiko Uenaka

Bosei Kannai Clinic, Kanagawa, Japan

Dietitian Subcommittee of Showakai Group, Tokyo, Japan

The traditional dietary culture of the Japanese, or 'washoku' was included on the UNESCO intangible cultural heritage list in March 2012. The Japanese meal style of 'one soup, three sides', is a nutritionally balanced meal promoting long life, and has attracted international attention as 'healthy food'.

However Japanese food, centered on white rice, also includes the daily consumption of miso soup and pickles, resulting in one negative aspect which is the high consumption of salt. While salt consumption is on the decline due to national salt reduction initiatives, daily salt intakes can reach up to 10 g. Heart failure is the number one cause of death in dialysis patients, and fluid overload in the body due to excess salt intake is a big factor. The effect of the Japanese dietary culture is said to be significant. Furthermore, with the current increase in nuclear families and those living alone, the increase in consumption of supermarket and convenience store meals is contributing to the excess salt intake.

From our investigation of salt reduction methods in dialysis patients, we believe that 'using herbs and spices' is effective in reducing salt. With clever cooking methods that make the best use of ingredients, as well as the addition of herbs and spices, salt reduction can be achieved without sacrificing flavor.

Amidst the diversification of Japanese diets that is associated with changes in lifestyles and environments, we hope to give advice on salt reduction methods while still taking advantage of the benefits of 'washoku' or Japanese food.

15:30–16:00

8. Working Process Improvement by Making an Education Video for Hemodialysis Patients

Ki Seon Lee

Kyung Hee University Medical Center, Seoul, Korea

We all know that self control ability of disease control and treatment is important for chronic patients. And that means comprehensive education and information is very important to hemodialysis patients. Though we knew that, we weren't able to educate new patients well because of several problems we were facing. Nurses were busy and had heavy work due to center expansion. We weren't able to give patients immediate education after patient's first hemodialysis and had difficulty of securing education time. It was also hard to find the schedule available for both the nurse and the patient. And patients, they had difficulty of communication due to their poor sight and hearing. They also had poor understanding and concentration due to their old age and chronic diseases. But as we expanded the center, we got tablet PCs attached to each bed, which meant audiovisual material was set for each patients during hemodialysis. So we got the idea of using these to educate the patients. And by this activity we were expecting to increase the education rate, decrease the time spent for education, and increase the nurses' satisfaction. The group subjects assessing the quality were the patients and nurses. By this activity, we were able to reach the goals we were expecting.

Korean Participants

Kyung Hee University at Gandong

Kim Myung Jae	MD, Male
Lee Sang Ho	MD, Male
Lee Yu Ho	MD, Male
Kim Ki Pyo	MD, Male
Hwang Myung Hee	Nurse, Female
Lee Kyoung Sin	Nurse, Female
Kim Ho Seok	Nurse, Female

Kyung Hee Medical Center

Kim Jin Sug	MD, Female
Choi Mi Ra	Nurse, Female
Lee Jong Sil	Nurse, Female
Lee Ki Seon	Nurse, Female

Kyung Hee Alumni

Kim Yeong Hoon	MD, Female
Song Min Su	MD, Male
Ryu Hye Yung	MD, Female
Young Ho Ko	Technician

懇親会にて