

Conferenceseries.com 1023rd Conference

12th Annual Conference on

Nephrology & Urology

July 06-07, 2017 Kuala Lumpur, Malaysia

Scientific Tracks & Abstracts (Day 1)



Page 21

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

Prevention of kidney diseases through a systems biology approach

Abdul Halim Abdul Jalil Lincoln University College, Malaysia

The key to preventing kidney diseases is in maintaining the body regulatory mechanisms in an optimum physiological state. Cellular functions are sensitive to the state of the extracellular matrix. Genetic and epigenetic factors interact in a myriad of ways to control cell phenotype through cell-matrix interactions thereby leading to a healthy or disease state. Each patient is unique in his/her physical, mental, social and psychospiritual domains, his environment and his lifestyle. The world we live in has changed so much with unprecedented environmental degradation, pollution, agricultural food production methods, xenobiotics in animal husbandry and endocrine disrupting chemicals, all contributing to dysfunctions in our body regulatory systems. The unbalanced external ecological system reflects itself in our own inner ecosystem, disrupting our immunological, endocrine and neurological systems. All these compounded by emotional and physical stresses lead to poorer cellular health and vitality. The objective of classical cell therapy has always been the enfreshment/restoration of the functional capability of the cells and their functional associates, the tissues and organs. It aims at producing a state of health thereby eliminating symptoms. In the Genomic era today, we see the possibility of using genomics, epigenomics, transcriptomics, proteomics, metabolomics, microbiomics (multi -omics) to provide biomarkers for prevention, ill health and healing. This is an exciting scientific development. A more integrative approach to medicine and research is imperative where positive outcomes of treatment are studied in the context of systems biology to find ways to correct the identifiable pathway perturbations thereby leading to treatment. The speaker will discuss management of kidney disorders with fetal precursor stem cell transplantation and the preparatory protocol to achieve the best possible state of the extracellular matrix. He will touch on the role of microbiome, nutrients, lifestyle, environmental and psychospiritual factors in influencing phenotypic expression through epigenetic mechanisms.

Biography

Abdul Halim Abdul Jalil is a Professor of Pediatrics at Lincoln University College, Petaling Jaya, Malaysia and is Consultant Paediatrician at KPJ Ampang Puteri Specialist Hospital. He was former Director of the Reproductive Research Centre, the National Population and Family Development Board, the Prime Minister's Department (1985-1990). His research interests include cholestatic jaundice in infancy, developmental and behavioural problems of childhood, cellular and molecular medicine. He is currently active in research on fetal precursor stem cells since 2006 for the treatment of medical conditions untreatable in mainstream medicine and on the use of eco-ultrafiltrates for treatment of genetic and chromosomal abnormalities in children. He is currently Senior Medical Consultant/Scientist to Fetal Cell Technologies International and is the author of 4 books on child health and 3 books on Live Cell Therapy the latest titled "Hope for untreatable medical conditions. Live cell therapy explained" (currently in print in the UK).

ajhalim100@gmail.com

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

Application of precursor stem cells and targeted organ-specific peptide therapy for kidney regeneration in patients with Chronic Kidney Disease

Dmitry Klokol

Stellar Bio molecular Research (SBR) and FCTI, Germany

Chronic Kidney Disease (CKD) is characterized by progressive deterioration of renal function due to loss of functioning nephrons. In spite of available treatments, CKD is still considered as irreversible, with gradually worsening condition that ultimately results in End-Stage Renal Failure (ESRF). Such situation urges to seek for new advanced therapeutic modalities that are able to restore renal function or at least substantially slow down the progression of CKD. Recent research and studies has shown that the most promising opportunity to restore nephron functionality is stem cell therapy. Due to morphological complexity of the kidney's ultrastructure the available options of autologous stem cell therapy has proven its failure to restore the anatomy and functionality of nephron. On the other hand embryonic and induced pluripotent stem cells have multiple unsolved safety issues. Latest scientific developments demonstrate that fetal precursor stem cells transplantation is the safest and most reliable method of renal cellular pool replacement in patients with CKD. In our study, we present data on efficacy of combination of precursor stem cells (FCTI) and targeted organ-specific peptides (SBI, MF+, Germany) in patients with CKD. Results of stem cell implantation were evaluated 6 months and 1 year after the procedure. Certain improvements of parameters of renal function test and downstaging of CKD, depending on the stage of the disease, were noted. There were no adverse reactions observed in treated patients. Precursor stem cells and organ-specific peptides (SBI, MF+, Germany) in management of CKD is a promising therapeutic modality and requires further detailed analysis and continued clinical trials.

Biography

Dmitry Klokol, upon completion of Medical Degree and further specialization in General Surgery has proceeded with PhD in Surgery in Institute of Emergency and Reconstructive Surgery and Post-doctoral study in the Field of Regenerative Medicine and Cell Therapy. He has vast clinical, academical and research experience in surgery, anti-aging, regenerative, complementary medicine and cell therapy. He has published more than 50 articles, 2 books and is a Member of the Editorial Board in one of American journals. At present, he is Head of Medical Advisory Board in International Biomolecular Research Company and Medical Director of European Wellness Centers.

dr.dmytro@sbi-europe.com

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

Cannulation technique influences Arteriovenous Fistula and Graft survival

Maria-Teresa Parisotto Fresenius Medical Care, Germany

Introduction: There is a close link between the availability of a well-functioning vascular access and patient survival on haemodialysis. Every effort should be made to maintain the functionality of the vascular access for long-term use. Practices of access cannulation vary from clinic to clinic, mainly for historical reasons.

Aim of the Study: The aim of this study is to investigate the impact of cannulation technique on the survival of the Arteriovenous Fistula (AVF) and Grafts (AVG).

Methods: In April 2009, a cross sectional survey was conducted in 171 dialysis units located in Europe, Middle East and Africa to collect details on vascular access cannulation practices. On the basis of this survey, a cohort of patients was selected for follow-up, inclusion being dependent on the availability of corresponding access survival/intervention data in the clinical database. Access survival was analyzed using the Cox regression model (adjusted for within country effects) defining as events the need for first surgical access survival intervention. Patients were censored for transplantation, death, loss of follow-up, or end of the study period (March 31, 2012). Results were adjusted for age, gender and diabetes mellitus.

Results: Out of the 10,807 patients enrolled for the original survey, access survival data was available for 7,058 (65%) of patients, these residing in Portugal, UK, Italy, Turkey, Romania, Slovenia, Poland and Spain. Mean age was 63.5±15.0 years; 38.5% were female; 27.1% were diabetics; 90.6% had a native fistula and 9.4% had a graft. Access location was distal for 51.2% of patients. During the follow-up, 51.1% were treated with antiaggregants and 2.8% with anti-coagulants. Prevalent needle sizes were 15 G and 16 G for 63.7% and 32.2% of the patients, respectively (14 G: 2.7%, 17 G: 1.4%). Cannulation technique was area for 65.8% and rope-ladder for 28.2%, and the direction of puncture was antegrade for 57.3%. Median blood flow was 350-400 mL/min.

Conclusions: The study revealed that area cannulation technique, despite being the most commonly used, was inferior to both rope-ladder and buttonhole for the maintenance of Vascular Access functionality. With regard to the effect of needle and bevel direction, the combination of antegrade position of arterial needle with bevel up or down was significantly associated with better access survival than retrograde positioning with bevel down. There was an increased risk of access failure for graft versus fistula, proximal *vs.* distal location, right arm *vs.* left arm, and the presence of a venous pressure greater than 150 mmHg. The higher HR associated with a venous pressure greater than 150 mmHg should open a discussion on currently accepted limits.

Biography

Maria-Teresa Parisotto has obtained her Nursing Diploma in 1974 and the Nursing Management Diploma in 1976, at the Nursing School Ospedale San Carlo, Milan, Italy. At the beginning of her career, she worked as Nurse Manager in a Dialysis Unit, Ospedale San Paolo, Milan, Italy. In 1980, she left the hospital and started to work as Application Specialist first, Marketing Director Peritoneal Dialysis afterwards in Fresenius Medical Care Italy. In 1999, she moved to Fresenius Medical Care headquarters (Bad Homburg, Germany) as Director Peritoneal Dialysis for Europe, Middle East and Africa. From 2006 till 2016, she worked in Fresenius Medical Care Deutschland GmbH – NephroCare Coordination, Bad Homburg, Germany as Director of Nursing Care Management for Europe, Middle East and Africa. Currently, she is working at Fresenius Medical Care Deutschland GmbH – Care Value Management, as Chief Nurse Advisor. Her main areas of interest and experience are vascular access cannulation and care, hygiene and infection control, dialysis processes analysis, safety in dialysis. Her publications focused on peritoneal dialysis, haemodialysis safety and quality and vascular access cannulation and care. She participated in scientific projects with EDTNA/ ERCA as Co-author for the development of "Environmental Guidelines for Dialysis – A practical Guide to Reduce the Environmental Burden of Dialysis", Co-Editor for the development of "Vascular Access Cannulation and Care – A Nursing Best Practice Guide for Arteriovenous Fistula" and Editor of the "Vascular Access Cannulation and Care – A Nursing Best Practice Guide for Arteriovenous Graft".

mparisotto@icloud.com

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

Solehring: A safe, easy and effective disposable circumcision device; A pilot clinical study in Malaysia and Indonesia

Mohamad Salleh bin Abdul Aziz¹, Abdul Latiff bin Mohamaed¹ and P Thamilselvam² ¹Cyberjaya University College of Medical Science, Malaysia ²FPKP- National Defense University Malaysia, Malaysia

Introduction: Solehring is a newly created disposable circumcision device. The design and concept are similar to Plastibell using surgical suture to and compress the blood vessel followed by cutting of the skin using surgical scissors. The ring will fall off from the skin within 10 to 14 days by concept of iscahemic-necrosis. The skin and mucosa part of penis will automatically healed by secondary intention.

Objective(s): The study was performed to identify and assess the safety of the device for circumcision in children.

Methodologies: A pilot clinical study was successfully conducted in Malaysia and Indonesia when conducting circumcision in children between the age of 7 to 12 years old with following end-points: Major adverse event, average pain score using visual analogue score, pain and swelling related with allergic reaction, bleeding during and post circumcision, infection rate and the drop off day (12).

Results: Out of 19 subjects who offered solehring circumcision procedure, 15 were able to complete circumcision technically. No major adverse events were reported. The drop off day was reported at day 10 (46.67%) and the latest is day 14 (13.33%). Average pain score was recorded as minimum as 2 out of 10 (26.67%). Only one child reported to have average pain score at 5/10.

Discussion: The study results from 3 different areas showed no major adverse events from 15 subjects. However, the sample size is inadequate to conclude the easy and effective disposable circumcision device. We encourage further study with larger sample size to assess the easy and effectiveness of the device.

Conclusion: Solehring is a safe device for circumcision in children.

Biography

Mohamad Salleh Bin Abdul Aziz is currently working as a faculty of Medicine in Cyberjaya College of Medical Sciences (CUCMS). He was awarded for best design by Japan Intellectual Property association (JIPA) during MTE 2017. He has completed his masters of surgery from University Kebangsaan Malaysia in 2011. Earlier he worked as Surgical clinical specialist at Department of Surgery Hospital Serdang, ERCP training in Department of surgery PPUKM (2012-2013), Surgical unit, Hospital Banting (2014 - 2015).

msalleh@cybermed.edu.my

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

Ferric Pyrophosphate Citrate (Triferic®), a novel therapy that treats anemia of inflammation and overcomes functional iron deficiency

Ajay Gupta^{1,2} and Raymond D Pratt² ¹University of California, USA ²Rockwell Medical, Inc., USA

F erric Pyrophosphate Citrate (FPC) is a novel, highly soluble iron salt for parenteral delivery *via* hemodialysis solution. FPC donates iron directly and rapidly to transferrin, avoiding iron sequestration in the reticuloendothelial system. Randomized, placebo-controlled clinical trials in chronic hemodialysis (CKD 5HD) patients have demonstrated that FPC delivery by hemodialysis can maintain iron balance by replacing regular iron losses, while reducing ESA use and maintaining hemoglobin (Hgb). In the double-blind PRIME study, 104 iron replete (serum ferritin, 200 1000 µg/L) CKD 5HD patients received FPC or placebo for 36 weeks. The ESA dose was titrated to maintain Hgb in the target range; intravenous (IV) iron was administered for serum ferritin <200 µg/L. Prescribed ESA and IV iron doses were reduced by 35% (p=0.045) and 45% (p=0.028), respectively, in the FPC group, without increases in levels of serum ferritin, hepcidin or markers of oxidative stress/ inflammation. In two single blind phase 3 studies (CRUISE), iron replete CKD 5HD patients received FPC (N=299) or placebo (N=300) for 48 weeks; changes in ESA and IV/oral iron doses were prohibited. Hgb was maintained at baseline levels in FPC treated patients in both studies, whereas placebo treated patients developed iron restricted erythropoiesis. Mean change in Hgb from baseline to end of treatment was 3.6 g/L lower for placebo than for FPC (p=0.011). The safety profile of FPC was similar to placebo, with no anaphylaxis. No increases in incidence of intradialytic hypotension, cardiovascular events, or infections were observed with FPC compared with placebo. FPC is effective in treating functional iron deficiency in states of inflammation, including CKD 5HD.

Biography

Ajay Gupta received his MBBS degree and completed his residency in internal medicine at the All India Institute of Medical Sciences (New Delhi). He is currently an Adjunct Associate Professor of Medicine at the University of California at Irvine and Chief Scientific Officer at Rockwell Medical, Inc. He is the inventor of dialysate iron therapy using FPC, as well as the inventor of IV iron therapy using slow continuous infusion of FPC. He has published more than 40 papers in reputed journals.

ajayg1@uci.edu

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

Prostate cancer- A complementary treatment approach

Michael D Wagener Stellar Bio molecular Research (SBR) and FCTI, Germany

Many prostate cancer patients use therapies promoted as literal alternatives to conventional medical care. Such "alternative" modalities are very often unproven or were studied and found worthless. These can be harmful. An even greater proportion of cancer patients use "complementary" treatments along with mainstream cancer treatment. Most are helpful adjunctive approaches that control symptoms and enhance quality of life. This review describes alternative as well as complementary therapies commonly used today by prostate cancer patients. Herbal remedies also are discussed. Evidence regarding the efficacy and safety of Complementary/Alternative Medicine (CAM) is reviewed, and implications for oncologists are discussed. To encourage open communication of CAM use by patients, oncologists should be knowledgeable about the most popular remedies and know where to find reliable information for themselves and for their patients.

Biography

Michael D Wagener received a Medical Degree from the University of Berlin, Germany, in 1991. During his Post-graduate training, he was trained in General Internal Medicine, Pneumology and Allergology in Davos (Switzerland). He received board certification in General Internal Medicine, Allergology and Pharmaceutical Medicine, and Neuraltherapy. In 1997, he joined Eli Lilly as a Clinical Research Physician, in 2005 Novartis Pharma in Basel and in 2009 he Became Chief Medical Officer of AC Immune in Lausanne (Switzerland). Since 2000, he was a member of the Executive Board of the Swiss Association of Pharmaceutical Medicine (SGPM) and in 2002 to 2008 he was elected as President of this organization. Since 2010, he is the Owner of an "Antiaging and Complementary Medicine Center" in Basel.

michaeldirk.wagener@gmail.com

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

The procaine-(base)-infusion: A review after twenty years of use

Ralf Oettmeier Stellar Bio molecular Research (SBR) and FCTI, Germany

Since its creation in 1905, Procaine (or Novocain) has been used in different ways, by several authors with therapeutic aims. Within these authors is important to mention to *Vishnevsky, Leriche, Speransky, Huneke* and *Aslan*. However, the highly-dosed infusion of Procaine-HCl with sodium bicarbonate as additive was first published twenty years ago. The method advanced to a routine therapy in many centers for pain treatment, rehabilitation and natural medicine.

The aim of this procedure is the systemic use of the various pharmacological features of Procaine, especially to inhibit pain and inflammation, for vasodilatation, anti-oxidation and to harmonize the nervous system. Beside the routine application of 2-3 ml pure procaine (1%) meanwhile the high-dosed procaine (base) infusion advanced to a routine in many centers for pain treatment, rehabilitation and natural medicine, especially in the German-speaking countries. On one hand shall the addition of sodium-bicarbonate balance the common latent pH-decrease in the periphery on the other hand also the degradation products of Procaine (DAE and PABA) have a systemic effect. For the safety of the patients and to improve the success rate of the method it was shown that the classic Procaine-Base-infusion should be only realized on the base of a prior acid-base-diagnostic. We recommend to start with a dosage of 100 mg Procain-HCl and 20 ml sodium-hydrogen-carbonate (8,4%) in 250 till 500 ml basic solution. The infusion takes place over approximately 45 - 60 Minutes. In steps of additionally 50 mg Procain-HCl and 10 ml sodium-bicarbonate (8,4%) the Procaine-Base infusion will be titrated till to the appearance of a good action. In patients with cardiovascular risk factors we recommend the use of surveillance technique (EKG, oximetry) up to 250 mg Procain-HCl. It is advised to ensure an after-treatment observation of 30 Minutes. Without any acid-base-household diagnostics before the Procaine-Base-infusion should not be administered more often than three times weekly and should have at minimum one day distance between. A series of 6 till 10 infusions depending from the problem have been approved. After meanwhile over 400.000 application of infusion neural therapy according the described regime in our clinic and outpatient department we have not observed one case with long-term or severe side effects. Indications of Procaine-(Base)-Infusion: The multiple Procaine features in combination with the alkaline additive are responsible for the enormous palette of medical indications. Especially all kinds of pain, inflammatory and auto-immune diseases, vegetative dysbalances and the complementary cancer medicine are standing in the foreground. Acute situations : Radicular syndrome, Pseudo-radicular syndrome, acute infection, early stage of Algodystrophia, sudden deafness, inflammations, migraine, activated osteoarthritis, postoperative pain treatment, followings of injuries. Chronic pain: multiple Arthralgia, chronic Radicular-/Pseudo-radicular syndrome, Algodystrophia, all kinds of Neuralgia, facetted pain syndrome, pain in patients with reduced kidney function. Chronic Inflammations: Lupus erythema odes, Rheumatoid-Arthritis, Psoriatic Arthritis, Scleroderma, Neurodermitis, Multiple Sclerosis, Mb. Crohn, Colitis ulcerous, Nephritis, patients after Kidney Transplantation. Others: periphery circulatory disorders, constipation, Dysmenorrhea clinical and Para-clinical hints for tissue acidosis, osteoporosis complementary cancer therapy, pre- and post-operative .

Biography

Ralf Oettmeier had his medical studying at the Friedrich-Schiller-University Jena (Germany). From 1993 – 2014 he worked in his own outpatient department with the focus on reflex therapies (Chirotherapy, Acupuncture, Neural Therapy), Homeopathy and special pain treatment and as leading head physician in the Clinic *"im LEBEN"* at Greiz, Germany. Since 2014 he is leading Doctor at the Paracelsus Clinic Lustmühle, Switzerland, a Comprehensive Center for Biologic-Integrative Medicine and Dentistry. He realizes considerable activities of seminars and presentations in the fields of Biological Medicine, is author of textbooks and publications in CAM, and finally of some guidebooks for patients.

ralf.oettmeier@gmx.de

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

A kidney health study on Mornington Peninsula population

Chiu Sze Fung Frankston Hospital, Australia

A kidney health check for the public was organised on World Kidney Day in 2015 and 2016 at Beleura Hospital, a private hospital in Mornington, Melbourne. The 8 hour event was run by doctors, nurses and volunteers. Blood pressure, height and weight were taken from each participant. A Q risk questionnaire was filled up. 183 participants in 2015 and 188 participants in 2016 took part in the event. 23% were diabetic in 2015 and 20% were diabetics in 2016. Half the participants (51%) were hypertensive in 2015 whereas 44% were hypertensive in the 2016 group. Cardiovascular disease was noted in 28% in 2015 and 21% in 2016. Overweight and obesity was common in this population. 36% was overweight and 35% was obese (noted in 2015). In 2016 overweight was noted in 38% and obesity in 26%. Smokers was taking up a mere 8% in 2015 and 6% in 2016.

The risk of developing chronic kidney disease in the next 5 years was higher in the diabetic group. (Noted in 2015). This again hold truth in the study in 2016. The risk of developing dialysis or transplant in the next 5 years was noted to be marginally higher in the diabetic participants. (Noted in both years)

The risk of developing chronic kidney disease in the next 5 years was noted higher in the participants with cardiovascular disease. (Noted in 2015 and 2016) The risk of developing chronic kidney disease in the next 5 years was noted higher in the participants with hypertension. (noted in 2015 and 2016). The risk of developing chronic kidney disease in the next 5 years was higher in the overweight and obese group as compared to normal weight group. (noted in both 2015 and 2016) In 2016 study, there was a steep increase in the risk of developing chronic kidney disease in 5 years in the obese group as compared to the overweight participants.

In summary, the risk of developing chronic kidney disease in the next 5 years was high in the participants with diabetes mellitus, hypertension, history of cardiovascular disease, overweight or obesity.

Biography

Chiu Sze Fung is presently working as a faculty of Medicine at Frankston Hospital, Victoria, Peninsula Private Hospital. She has earlier worked as a senior lecturer /Associate Professor at University Putra Malaysia.

alinda410@hotmail.com

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

3-year survival rate of kidney transplant recipient in Cipto Mangunkusumo General Hospital Indonesia

Vidhia Umami, Maruhum Bonar H Marbun and Endang Susalit University of Indonesia, Indonesia

Background & Aim: Kidney transplant has been developing rapidly in Indonesia in recent years. Cipto Mangunkusumo General Hospital (CMGH) has performed 491 transplants in the last 6 years. The survival of graft and patients in CMGH in the first year were 85.4% and 88.5%. However, there was no data on survival in the next following years. This study was aimed to establish the 3-year survival of graft and patient of kidney transplant in CMGH.

Method: A descriptive study with retrospective cohort design on all kidney transplant patients at CMGH from January 2011 to May 2014 was conducted. Each patient was observed from the date of transplantion until death or May 2017. Graft and patient survival rate within 3 years and at the end of the study were documented. The Kaplan-Meier method was used to describe graft and patient survival.

Results: 138 of 147 kidney transplant recipient were included. All patients received kidneys from living donors. The mean age was 47.94±14.06 years old. The 3-year death censored graft survival, all-cause graft survival and patient survival were 90.6%, 76.1% and 79.7%, in sequence. At the end of the study, these survival rates were lower (89.1%, 71.7%, and 76.1%). The median of observation time was 42 months (36-72 months). Kaplan-Meier's curve showed the highest mortality rates occured in the early months. Infection was the main cause of death.

Conclusion: The 3-year graft and patient survival in CMGH is known. Infection is the major factor that affect the survival rates.

Biography

Vidhia Umami has completed her Specialist program in Internal Medicine, University of Indonesia in December 2012. She was also graduated from Faculty of Medicine University of Indonesia, for her Medical Doctor in August 2005. She is now in Consultant program in Nephrology and Hypertension at Internal Medicine Faculty of Medicine, University of Indonesia, Cipto Mangunkusumo General National Hospital. She worked at several hospitals in Indonesia and now actively work in Bahkti Asih Hospital, Tangerang and also in Cipto Mangunkusumo General Hospital. She is a member of Indonesian Medical Association, Indonesian Society of Internal Medicine, Indonesian Society of Nephrology, Indonesian Society of Hypertension, and Indonesian Transplantation Society. She has published numerous articles and posters in several conferences throughout the world.

vidhiaumami@yahoo.com

12TH ANNUAL CONFERENCE ON

NEPHROLOGY & UROLOGY JULY 06-07, 2017 KUALA LUMPUR, MALAYSIA

Evaluation on self-adjusted phosphate binder dose to dietary phosphate content in the management of hyperphosphatemia among hemodialysis patients in Penang, Malaysia

Khor Su Mee University Science Malaysia, Malaysia

yperphosphatemia is a serious and pervasive problem which will lead to secondary hyperparathyroidism, renal osteodystrophy and vascular calcification among dialysis patients. Therefore, prevention and correction of hyperphosphatemia has become major goal of treatment for these patients. Generally, poor adherence to phosphate binder prescription and poor dietary phosphate control are the main factors that cause failure in achieving the target phosphate level. Nowadays, there are more and more convenient foods which are very accessible, tasty, and cheaper than fresh and unprocessed healthy food. These foods content phosphate additive resulted 2-3 fold increase of dietary phosphate intake. Studies showed that 90% of the phosphorus additive is believed to be absorbed in the intestinal tract, as opposed to only 40-60% of intestinal phosphorus absorption in animal protein and 10-30% in vegetarian protein. Thus, the aim of this study is to create a friendly self-adjust PB tool (SPT) for better controlling the phosphate level among these dialysis patients. The Phosphate Unit (PU) to meal phosphorus content (considering the intestinal phosphorus absorption of inorganic phosphate additive and the organic phosphorus in natural food) was developed from the common eaten foods by the dialysis patients in Penang state. This intervention, random control trial study was carried out from September 2015 to September 2016. A total of 108 hemodialysis patients with phosphate level more than 1.8 mmol/L were recruited from 8 hemodialysis centers in Penang state. They were divided into 2 groups. The standard group underwent standard diet counseling while the intervention group underwent a counseling using the SPT. For data analysis, the ANOVA was used to compare the differences of phosphate level between the intervention and standard group at baseline, 1 month, 3 months and 6 months follow-up. Studies showed that there was a significant difference between these 2 groups, p<0.05. As conclusion, self-adjust PB to dietary phosphate content may increase the adherence of phosphate binder among hemodialysis patients. This concept for managing hyperphosphatemia can avoid excessive phosphorus loads and keep the number of phosphate binder pills to a tolerable limit.

Biography

Khor Su Mee is currently pursuing PhD in Clinical Pharmacy at University Science Malaysia. She has completed her Master of Science in Clinical Pharmacy in the year 2012 and Degree of Dietetic in 2002. She is a Clinical Dietitian from the Malaysia's Government Hospital since 2002. She is also a Clinical Instructor for Dietetic students from many local and private universities like University Kebangsaan Malaysia, University Putra Malaysia, Uitm, International Medical University and University Sciences Malaysia. She has published papers in journals and was awarded for best Free Oral Paper at Malaysian Dietitian's Association Conference in 2012.

khorsumee@hotmail.com