

Proceedings of
23rd International Conference on

HERBAL AND ALTERNATIVE REMEDIES FOR DIABETES AND ENDOCRINE DISORDERS

November 02-04, 2017 Bangkok, Thailand



Conference Series Ltd

One Commerce Center-1201

Orange St. #600, Wilmington, Zip 19899, Delaware, USA

General Number: 1-650-889-4686

Kemp House, 152 City Road, London EC1V 2NX, UK

Toll Free: +0-800-014-8923

Toll Free: Japan: 81-345780247 | Singapore: 800-852-6126 / 65 8008526126

USA/Canada: 1-800-216-6499

Email: herbaldiabetes@diabetesexpo.com | herbaldiabetes@endocrineconferences.com



conferenceseries.com



conferenceseries.com
1431st Conference

23rd International Conference on

Herbal and Alternative Remedies for Diabetes and Endocrine Disorders

November 02-04, 2017 Bangkok, Thailand

Keynote Forum (Day 1)



23rd International Conference on

HERBAL AND ALTERNATIVE REMEDIES FOR DIABETES AND ENDOCRINE DISORDERS

November 02-04, 2017 Bangkok, Thailand



Marina Cetkovic-Cvrlje

St. Cloud State University, USA

The effect of *Garcinia kola* seed extract on the development of disease in an autoimmune mouse model of type-1 diabetes

Type-1 Diabetes (T1D) is an insulin-dependent autoimmune disease characterized by T-cell mediated autoimmune destruction of insulin-producing pancreatic β -cells. *Garcinia Kola* Heckel (GK), or bitter kola, is a medicinal plant found in Central and Western Africa, which seeds' extract (GKE) has been proposed to exhibit anti-inflammatory and hypoglycemic properties. Considering that GKE has never been studied in the context of T1D and its enormous relevance in folkloric medicine, we aimed to define whether GKE exhibits anti-diabetic properties and affects T-cells by its anticipated anti-inflammatory action. Thus, it is hypothesized that GKE treatment would prevent development and reduce the severity of T1D in an experimental mouse model, low-dose Streptozotocin (STZ)-induced autoimmune T1D, by affecting pathogenic T-cells. Aqueous- and ethanol-based GKE were extracted and administered orally (via drinking water) to C57BL/6 male mice in a dose of 100 mg/kg/day from 7 to 12 weeks of age. At 8 weeks of age, T1D was chemically induced by five consecutive injections of 40 mg/kg STZ. Body weights and blood glucose levels were measured before STZ administration and bi-weekly from day 8 until day 29 post first STZ injection. GKE mechanisms of action in the context of T-cells, such as the effect of GKE on T-cell populations/subpopulations and T-cell function (proliferation assays and cytokine profiles), was studied as well at two endpoints during disease development. The results showed that GKE treatment did not reduce body weights and glycaemia; even a trend of elevated body weights and hyperglycemia levels was observed in GKE-treated mice. Surprisingly, while decreasing T-cell populations/subpopulations, GKE exposure significantly increased T1D incidence in STZ-treated mice. In conclusion, this study, as the first examination of the anti-diabetogenic potential of GKE in T1D, did not confirm its potential in a reduction of hyperglycemia and prevention of T1D.

Biography

Marina Cetkovic-Cvrlje is a Professor of Immunology in the Department of Biology, Saint Cloud State University, USA. She has devoted her entire career to autoimmune Type-1 Diabetes (T1D) research. Since joining SCSU, she has established a Laboratory for Immunology, providing research opportunities for numerous undergraduate and graduate students to study effects of various environmental compounds on the development of autoimmune diabetes in murine models of T1D. She has been teaching immunology, pathophysiology and public health controversies and has been a strong advocate for raising awareness about effects of environmental compounds on T1D.

mcetkoviccvrlje@stcloudstate.edu

23rd International Conference on

HERBAL AND ALTERNATIVE REMEDIES FOR DIABETES AND ENDOCRINE DISORDERS

November 02-04, 2017 Bangkok, Thailand



Jeena N Janardhanan

Kerala University of Health Sciences, India

Diabetic retinopathy: Management of acute visual loss with herbal (Ayurvedic) medicines

Diabetic retinopathy is a common complication of chronic uncontrolled diabetes. The occurrence of diabetes is on a rise, so are its complications. Retinopathy counts as the second most common cause for blindness, around the globe. Features of retinopathy include microaneurysms of retinal capillaries, hemorrhage, hard exudates and cotton wool spots. Although, retinopathy is a chronic condition, acute visual loss sometimes occurs due to sudden bleeding into vitreous or bleeding in and around macula. Western medicine usually adopts laser photocoagulation in such conditions. Since it damages the retina to a certain extent, it is usually avoided in cases where macula is involved. Such acute visual loss cases due to hemorrhage are treated with a special procedure called Sirodhara (pouring of medicated water, oil, milk etc., on the forehead in a continuous stream). The herbal medicines used are *Madhuca indica*, *Santalum album*, *Vetiveria zizanoides*, *Embllica officinalis*, *Symplocos racemosa* along with lac (resinous material secreted by *Laccifer lacca* insect). Milk is specially prepared with these drugs and used daily as a continuous stream on forehead for one hour for a continuous period of 7 days. 15 patients were included in this clinical trial till date. Ophthalmoscopy and visual acuity tested before and after the treatment. In all the patients, hypoglycemic drugs were given along with the procedure. The hemorrhage was seen well controlled and completely absorbed in ophthalmoscopy. The visual acuity also improved remarkably.

Biography

Jeena N Janardhanan is a Doctor (Ayurveda) specialized in ENT and Ophthalmology. She has been in the field of research, academics as well as administration for the past 14 years. She is presently an Associate Professor and HOD at Vaidyaratnam P S Varier Ayurveda College, Kerala University of Health Sciences, India. She has been in the field of Ayurveda, treating patients for the past 20 years.

drjeenanj@gmail.com

Notes:



conferenceseries.com



conferenceseries.com
1431st Conference

23rd International Conference on

Herbal and Alternative Remedies for Diabetes and Endocrine Disorders

November 02-04, 2017 Bangkok, Thailand

Keynote Forum (Day 2)



23rd International Conference on

HERBAL AND ALTERNATIVE REMEDIES FOR DIABETES AND ENDOCRINE DISORDERS

November 02-04, 2017 Bangkok, Thailand



Nicolas F Wiernsperger

University of Lyon, France

Evidences that insulin resistance, core of cardiometabolic diseases, is the primary therapeutic target

Cardiometabolic diseases affect about one third of the worldwide population. Recent years revealed that the core of these different pathologies is insulin resistance. Diminished sensitivity to insulin leads to various metabolic and vascular (both macro- and microvascular) disturbances. Epidemiology and clinical observations show that resistance to this hormone can be seen very early, possibly already in early childhood. It has clear-cut impacts on adult health and worsens with aging, however also aging-related diseases such as cognitive dysfunction and related dementias are also associated with resistance to insulin. The presentation will show the poorly recognized importance of microvascular insulin resistance as well as many aspects of this defect in various tissues. It will also be shown how to detect this parameter easily and early in human beings. Finally suggestions will be made about possible new treatment strategies.

Biography

Nicolas F Wiernsperger is a French Physiologist and Pharmacologist. He has been Head of Research Department on Cerebrovascular Accidents at Novartis, Switzerland until 1984. He established as a world recognized Specialist of Microcirculation. From 1985 to 2005, he was appointed as the Head of International Pharmacological Development and Senior Pharmacologist at Merck KgA in Lyon. He was also the Head of a private/public research unit on Diabetes Microvascular Complications at Lyon University. He is an international recognized expert of cardiometabolic diseases and aging. He has published nearly 150 papers as well as 2 books. He has been teaching as Invited Professor at several universities. Since 2005, he deals with the development of new drugs as well as, more recently, nutraceuticals.

nicowi@hotmail.fr**Notes:**

23rd International Conference on

HERBAL AND ALTERNATIVE REMEDIES FOR DIABETES AND ENDOCRINE DISORDERS

November 02-04, 2017 Bangkok, Thailand



Shigehiro Katayama

Saitama Medical University, Japan

Recent progress for the treatment of diabetic nephropathy

In Japan, diabetic nephropathy is the leading cause requiring dialysis since 1998. The number of patients under dialysis is about 320,000, 40% of which are diabetics. Since dialysis costs expensive, prevention of the progression of diabetic nephropathy is an urgent target. We evaluated the incidence of diabetic nephropathy (macroalbuminuria of more than 300 mg/g.Cre) from normo- and low-microalbuminuria (<150 mg/g.Cre) in 1550 type-2 diabetics during 8 years. The onset of macroalbuminuria was observed in 0.67% of the patients, which was one third of the incidence reported in UKPDS. Moreover, 30% of patients with low-microalbuminuria returned to normoalbuminuria (remission/regression). The higher the initial albuminuria, HbA1c, or systolic blood pressure was; the progression risk to macroalbuminuria was higher. Smoking was also the risk for diabetic nephropathy. There were many trials which elucidated the effectiveness of ACE inhibitors or ARBs (angiotensin II receptor antagonists) including ours such as Japan IDDM, INNOVATION, ORIENT and ROADMAP study. However, relative risk reduction with these RAS inhibitors was about 20-30% in patients with macroalbuminuria and 60% in patients with microalbuminuria. We need more vigorous strategy to prevent the new onset and/or progression of diabetic nephropathy. Recent trials using SGLT2 inhibitors such as empagliflozin or canagliflozin decreased not only cardiovascular outcomes by 14% but also renal outcomes by 30-40%. SGLT2 inhibitors may increase sodium delivery to the macula densa and then improve TubuloGlomerular (TG) feedback, which may result in constriction of afferent arteriole and hence amelioration of hyperfiltration. DPP-4 inhibitors and GLP-1 receptor antagonists may have such an action as well. These new hypoglycemic agents may have a great potential to protect renal functions, especially diabetics with hyperfiltration. Furthermore, we are waiting new renoprotective drugs such as anti-oxidant Nrf2 stimulator, bardoxolone methyl or non-steroidal Mineralocorticoid Receptor Antagonist (MRA), finerenone.

Biography

Shigehiro Katayama has been the Director of Saitama Medical University Hospital since 2008 and the Deputy Head from 2002 to 2008. He is currently Director of Saitama Medical University Kawagoe Clinic since 2014. He also has been the Professor and the Head of Endocrinology and Diabetes Division at Faculty of Medicine, Saitama Medical University since 1995 and retired to be Emeritus Professor in 2015. He has graduated from Faculty of Medicine, The University of Tokyo and received MD degree in 1973 and PhD degree in 1980 from The University of Tokyo. He was Postdoctoral Research Fellow at the Rockefeller University in 1980 and Assistant Professor at the State University of New York at Buffalo from 1981-1983. He moved to Saitama Medical University in 1983. His research interests are in hypertension in diabetics in relation to effects of hypoglycemic and/or hypotensive agents on insulin resistance and in relation to diabetic nephropathy. He is a board certified Member of Japanese Society of Internal Medicine, Japan Endocrine Society, Japanese Society of Nephrology, Japanese Society of Hypertension, Japanese Society of Diabetes and a Fellow of American Diabetes Association, American Heart Association (High Blood Pressure Council). He has also received Expert Investigator Award from the Japanese Society of Diabetic Complications in 2012 and Society Award from the Japanese Society of Hypertension in 2013.

skataya@saitama-med.ac.jp

Notes: