



Global Experts Meeting on

Infectious Diseases, Diabetes and Endocrinology

February 27-28, 2019 Tokyo, Japan

Posters

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Effectiveness of albendazole against viability of *Entamoeba histolytica* in experimental animals

Abdul Salam M Al-Mukhtar
University of Mosul, Iraq

Aim: Intestinal amoebiasis is still an important health problem in developing countries of the world. One of the most issues for future biomedical research is the development of antimicrobial resistant, in order to search for alternative new anti-amoebic drugs. A study was carried out to evaluate the efficacy of Albendazole on the viability of *Entamoeba histolytica* clinical isolate from human which used for experimental animals.

Method: All experimental animal models (30 albino mice and 30 rabbits), divided into 3 groups, each group with either 10 mice or 10 rabbits, were orally infected with *E. histolytica* (clinical isolate), then after 7 days they were given drugs (Metronidazole or Albendazole) daily according to body weight prepared in advance for 5 days duration and in addition to the controls without drugs. Stool specimens of each group were examined microscopically for viable trophozoites and the number of these trophozoites was counted with hemocytometer chamber, as compared to untreated and treated groups. Statistical methods used were student t-test.

Result: The results showed infection of *E. histolytica* was able to be initiated in rabbits only. Albendazole and Metronidazole were highly effective (100%) on treatment of infected groups of rabbits. Trophozoites of *E. histolytica* was highly sensitive to Albendazole (25% viability) or to Metronidazole (22.7% viability) at a dose of 400 mg/kg/day and 250 mg/kg/day, respectively which was significant in relation to the control 500% viability. However, the differences were significant at the level ($p < 0.01$).

Conclusion: The present study showed that the newly used Albendazole is very effective anti-amoebic drug as Metronidazole in rabbits.

salam_1943@yahoo.com

Notes:

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Use of daptomycin due to lactic acidosis complicated by linezolid for prosthetic valve endocarditis due to vancomycin-resistant *Enterococcus faecium*: Case report

Soo You Lee

Sejong General Hospital, Republic of Korea

Enterococci have become common nosocomial pathogens and are currently the third-leading causes of nosocomial bloodstream infection. Vancomycin-Resistant Enterococci (VRE), mostly *Enterococcus faecium*, are increasingly involved, especially in critical patients with co-morbid condition. The options for treatment of VRE have improved over the years with the advent of oxazolidinone linezolid, the glycylicycline tigecycline and the lipopeptide daptomycin. Nonetheless, toxicities may limit their use. We here report a case of VRE prosthetic valve endocarditis with daptomycin due to severe lactic acidosis complicated by Linezolid. A 45 years old female, who had undergone prosthetic aortic valve replacement 15 years back, is presented with cardiogenic shock. Chest X-ray showed pulmonary edema. Pannus formation on a Hancock II 21 mm aortic valve prosthesis in the aortic position as depicted by transthoracic echocardiogram. Oliguria was developed and eGFR was low. She underwent continuous renal replacement therapy. Until waiting redo aortic valve replacement, abruptly fever was developed. Transthoracic echocardiography showed vegetation at tricuspid valve. Urgent aortic valve replacement was done without complication. Blood cultures grew *Enterococcus faecium*, which was resistant to vancomycin but susceptible to linezolid and daptomycin. However, tissue cultures showed no growth results. Treatment with intravenous Linezolid was initiated. Her bacteremia initially cleared. After 16 days on treatment of linezolid, lactic acid was elevated up to 15 mmol/L. We switched linezolid to daptomycin. Lactic acid was decreased to normal range after 8 days stopping linezolid. Severe lactic acidosis with linezolid present barriers to effective treatment. Serial follow up of lactic acid during treatment with Linezolid is crucial to management patients with VRE.

Biography

Soo Youn Lee has completed her Doctor of Medicine from Chosun University College of Medicine. She is the Director of ICU at Sejong General Hospital, Bucheon, Republic of Korea. She has published 6 papers in reputed journals.

leesy@sejongh.co.kr

Notes:

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Does diabetes mellitus cause CYP2C19 phenoconversion? Evaluation of metformin and cinnamon effects on CYP2C19 activity in type 2 diabetic rats

Hanieh Entezari

Tehran University of Medical Sciences, Iran

Introduction: Change in the metabolism of drugs is very likely in diabetes mellitus. This study assessed the changes in enzymatic activity of CYP450 2C19 in liver by using omeprazole as probe in the animal model of type II diabetes, before and after administration of metformin and cinnamon.

Method: 28 male Wistar rats randomly divided into 7 groups. 7 days after induction of diabetes type 2, test groups received metformin, cinnamon and metformin plus cinnamon daily for 14 days. In day 21, rats were subjected to liver perfusion by Krebs-Henselit buffer containing omeprazole as CYP2C19 probe. Perfusate samples were analyzed by HPLC-UV in order to evaluate CYP2C19 activity.

Result: The average metabolic ratio of omeprazole was changed from 0.091 ± 0.005 in the control group to 0.054 ± 0.005 in the untreated diabetic group (p -value=0.003). This average was increased inordinately to 0.218 ± 0.036 in the treated group with metformin. Interestingly, administration of cinnamon with metformin in diabetic rats caused the enzyme activity to return (0.085 ± 0.002) to the observed levels (0.091 ± 0.005) in control group (p -value=0.26).

Conclusion: The results of the study showed that despite the suppression of CYP2C19 enzyme activity in type 2 diabetic rats, administration of metformin can severely increase the enzyme activity. Surprisingly, simultaneous use of cinnamon and metformin can modulate the function of CYP2C19 to the observed level in control group and make it more predictable to treat diabetes mellitus and fate of other drugs that metabolize by this enzyme.

Biography

Hanieh Entezari has completed PhD from Tehran University of Medical Sciences. Her current position is pharmacist in the Sina Hospital. She has done some research in bio-pharmacy and pharmacognosy lab. She has participated in PCS 2nd Global Diabetes Conference (GDC-2017), Prague, Czech Republic and 14th Iranian Pharmaceutical Sciences Congress (IPSC), Tehran University of Medical Sciences, School of Pharmacy, Iran (2016). She has experience in handling and surgery of animal lab and can work with HPLC device.

tums1391@yahoo.com

Notes:



Global Experts Meeting on

Infectious Diseases, Diabetes and Endocrinology

February 27-28, 2019 Tokyo, Japan

e-Posters

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Artificially low hemoglobin A1C in diabetic patients with hemoglobin E homozygote

Passorn Sueyanyongsiri, P Tangbundit, S Sueyanyongsiri, S Bunmee and P Khansri
Surin Hospital, Thailand

A decreased life-span of erythrocytes is associated with lower concentration of hemoglobin A1C (HbA1c). This research aims to study effect of hemoglobin E homozygote on HbA1c level of diabetic patients in Surin Hospital. A cross-sectional study was conducted from 2009 to 2016. Patient's profile, fasting plasma glucose and HbA1c level were collected and divided in hemoglobin E homozygous group and control group. Each sample arm was classified into eight strata according to blood glucose level to compare HbA1c level in each subgroup. During 2009-2016, 81 diabetic patients with hemoglobin E homozygote were found from overall 353 negative Dichlorophenol-Indolephenol (DCIP) diabetic patients. There is no difference of sex, average age, duration of disease and fasting plasma glucose between hemoglobin E homozygote and control group. Patients with hemoglobin E homozygous group had lower HbA1c level than those of control group ($P < 0.05$). Since HbA1c levels is presently the best indicator of long-term glycemic control. With similar fasting plasma glucose, hemoglobin E homozygote is associated with lower HbA1c level.

Biography

Passorn Sueyanyongsiri has pursued her MD from Chulalongkorn University and Post-Doctoral studies from Mahidol University School of Medicine. She is a Medical Teacher in Surin Hospital, affiliated institutes of Suranaree University of Technology, Thailand.

drpassorn@gmail.com

Notes:

Global Experts Meeting on INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY February 27-28, 2019 Tokyo, Japan

Some notes about medical applications for microbial biosurfactants

Samer M Al-Hulu

Green University of Al Qasim, Iraq

Bio-surfactants are amphiphilic biological compounds created extracellular or cell membrane part bacteria, yeast and filamentous fungi. Bio-surfactants are made up of a hydrophilic moiety, may be acid, peptide, cation, anion, mono, di or polysaccharides and a hydrophobic moiety, which may be unsaturated or saturated hydrocarbon chains or fatty acids. Many advantages for bio-surfactants include biodegradability, low toxicity, biocompatibility and digestivity, availability of raw materials and specificity. The bio-surfactant production was detected by many methods includes, hemolytic activity, oil displacement test emulsification index, surface tension reduction, blue agar plate or CTAB agar plate method, hydrocarbon overlay agar method. There are many medial applications for bio-surfactant which includes antimicrobial activity. Bio-surfactants having ability to be toxic on cell membrane permeability in similar method to detergent effect, anti-cancer activity, the neuronal differentiation in PC 12 cells induced by MEL and get ready the ground work for the use of microbial extracellular glycolipids as novel reagents for cancer cell treatment, antiviral activity, the sophorolipids surfactants produce by *C. bombicola* having structural analogues such as the sophorolipid diacetate ethyl ester which is powerful spermicidal and virucidal agent and its virucidal activity similar to nonoxynol-9 against the human semen. Anti-adhesive agents, bio-surfactants having ability for adhesion inhibiting for pathogenic organisms to solid surfaces or infection site, anti-fungal activity, flocculosin is a glycolipid produced by yeast like fungus *P. flocculosa* having antifungal activity against pathogenic yeasts and human mycoses. Immunological adjuvants, bacterial lipo-peptides when mix with classic antigens having active nontoxic, non-pyrogenic immunological adjuvants. Gene delivery, the liposomes based on bio-surfactants having increasing efficiency for gene transfection than cationic liposomes trading use.

Biography

Samer M Al-Hulu is a Microbiology Specialist. He has completed his PhD from Babylon University/College of Science. He has published more than 14 papers in Microbiology field. He has training at Ministry of Health at Laboratory of Babylon Maternity and Children Hospital. He is currently working at Al-Qasim Green University/College of Environmental Sciences.

alhusamer@gmail.com

Notes:

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Prognostic value of dysglycemia in cerebral hemorrhage in patients with metabolic syndrome

Tarek Amin Abdulhamid El-shazly, Amr M Elrabat, Adel Abraham Abdu El-Salam and Osama A Abd El-Salam
Mansoura University, Egypt

Background & Aim: Metabolic syndrome is increasing worldwide, and is increasing in women than men, and is increasing in parallel with increasing age and obesity. Dysglycemia is one of IDF 2006 criteria for definition of metabolic syndrome. The aim of the work is to evaluate the role of dysglycemia in cases of cerebral hemorrhage in patients with metabolic syndrome.

Patients & Methods: 240 patients presented with hemorrhagic stroke were divided into two groups according to IDF criteria (2006), full investigations, including laboratory investigations, ECG, chest x-ray and brain CT.

Results & Conclusion: Among 240 patients with cerebral hemorrhage 77 patients have metabolic syndrome (32%), 22 patients had obesity, hypertension and dyslipidemia, 31 patients had obesity, hypertension and diabetes and 24 patients had all metabolic syndrome components. As regard dysglycemia, the presence of metabolic syndrome increases relative risk of dysglycemia by 2.5 fold in Met.s patients than non-Met.s patients also, dysglycemia increases relative risk of mortality of cerebral hemorrhage with Met.s by 1.04 fold than with normal glucose tolerance.

Biography

Tarek Amin Abdulhamid El-shazly has completed MD in Internal Medicine from Mansoura University. He has worked as a Consultant Gastroenterology and Hepatology at King Fahd Hospital Madinah Monawarah. Currently, he is working as an Assistant Professor of Internal Medicine Department, Faculty of Medicine, Mansoura University, Egypt.

rtarekameen@yahoo.com

Notes:



Global Experts Meeting on

Infectious Diseases, Diabetes and Endocrinology

February 27-28, 2019 Tokyo, Japan

Accepted Abstracts

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Prevalence and atherogenic index of plasma as a predictor of cardiometabolic syndrome amongst road transport workers in Owerri

Charles Chukwuemeka Onoh

Federal University of Technology, Nigeria

Cardiometabolic Syndrome is a constellation of cardiovascular risk factors which include diabetes, hypertension, obesity, dyslipidaemia amongst others. The Atherogenic Index of Plasma (AIP) is the logarithm of molar ratio of Triglycerides to High-Density Lipoprotein cholesterol (TG/HDL-cholesterol). This study was designed to determine the prevalence and predictors of cardiometabolic syndrome among road transport workers. The study was a work-site based cross-sectional study carried out on 120 workers at Imo Transport Corporation, Owerri. The questionnaires were designed to address the background information of the respondents with respect to gender, age, job title, departments and address. The respondents were anthropometrically examined. The prevalence was calculated as a ratio and reported in percentage. Principal Component Analysis (PCA) and multinomial probit regression model were employed to determine the degree of relationship between the AIP and cardiometabolic parameters and their order of importance. The prevalence of cardiometabolic syndrome was found to be 19.17%. AIP was shown to be statistically significant and positively correlated with Waist Circumference (WC) and Body Mass Index (BMI). AIP was shown to be a principal dominant predictor of cardiometabolic syndrome. AIP as a calculated factor can be used in the clinical setting for assessing cardiometabolic syndrome beyond the routinely done lipid profile.

drcharlesonoh@gmail.com

Global Experts Meeting on INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY February 27-28, 2019 Tokyo, Japan

Evaluation of *Bidens pilosa* as treatment for diabetes in Zambia

Davies K Chisenga
Kasama General Hospital, Zambia

Introduction: Diabetes is a chronic metabolic disease that occurs when the human body is not able to produce enough of the hormone insulin or because cells do not respond to the insulin that is produced by the alpha and beta cells of the islets of Langerhans of the pancreas, as a result there is high glucose level above 3.5 to 6.5 mmol/l in the body because these cells regulate the entry of glucose into and out side of the cells for energy production. There are two major types of diabetes, Type-1 Diabetes, in which there is malfunctioning pancreas and can't regulate blood sugar. Type-2 Diabetes happens when pancreas stops producing enough insulin and secondly, when the body stops absorbing and using insulin correctly. Inflammation has been implicated as a possible origin of numerous local and systemic diseases, such as cancer, cardiovascular disorders, diabetes mellitus and celiac disease. This study explored the use of *Bidens pilosa* extract as the cure for both type-1 and 2 after 60 days of administration.

Aims & Methodology: To evaluate the efficacy of *Bidens pilosa* leaf extract in diabetic and hypertensive clients. To determine the blood sugar level in the study population. The Randomized Stratified (block) experimental design was used in this research and the sample size was 64 subjects were tested prior to a treatment for high blood sugar. The same subjects are tested again after treatment with a blood-sugar lowering medication. By comparing the same patient's results before and after treatment, each patient is effectively used as their own control.

Results: *Bidens pilosa* extract has been used during the study on 64 clients in Zambia, whose blood sugar levels ranged from 10 mmol/L to 35 mmol/L. After administration for 60 days the mean blood sugar levels in sample population was 6.2 mmol/L. with $\text{std}\pm 2.3$ while the chi-square asymptomatic significance at 0.927 at start and after drug administration 0.128. The point probability was 0.022. The exact significance at start was 0.949 while after drug administration was 0.134. The T-test paired correlation was 0.236 while the significance was 0.098, CI=0.95. Therefore, the null hypothesis is accepted that *Bidens pilosa* extract can cure by 98% of type-1, type-2 diabetes and hypertension than the conventional medicine.

Conclusion: *Bidens pilosa* extract can cure by 98% of type-1, type-2 diabetes and hypertension than the conventional medicine It exhibited good efficacy and showed antibacterial properties to Gram negative bacteria found in the gastrointestinal tract.

K_chisenga@hotmail.com

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

A case of Vogt-Koyanagi-Harada syndrome with conjunctival abscess and iatrogenic Cushing's syndrome

Eli-Anne Pearl Suarez-Gonzales, Marita Mendia Fuentes, Angeline Therese Magbitang Santiago and Elizel Lagunzad Claveria
Hospital ng Maynila Medical Center, Philippines

Vogt-Koyanagi-Harada syndrome is a rare autoimmune disease affecting the pigmented tissues in the eyes, ears, skin and central nervous system. It is usually complicated by ophthalmologic sequelae such as scleral thinning, cataracts and glaucoma. This is a case report of a 30-year old female, diagnosed case of Vogt Koyanagi-Harada Syndrome (VKH), on prolonged oral steroid and azathioprine use, presenting with rare complication of conjunctival abscess and iatrogenic Cushing's syndrome. Patient presented with headache, eye redness and pain that progressed to formation of white necrotic nodules on the left bulbar conjunctiva. Physical examination revealed hyperemic conjunctivae with necrotic-centered nodules on the inferonasal bulbar conjunctiva and superotemporal bulbar conjunctiva of the left eye, bluish sclera with corneal opacity on the right eye, buffalo hump, moon facies, hirsutism, oligomenorrhea, central obesity with striae, vitiligo and poliosis. Assessment was Vogt-Koyanagi-Harada, in flare, conjunctival abscess, OS, iatrogenic Cushing's syndrome. Initially managed with topical antibiotics but symptoms progressed. Drainage of the abscess could not be opted due to possible globe rupture and spread of abscess hence, conservative medical management was done. The patient was started on culture-guided systemic antibiotics and since she was in flare, she was also given pulse steroid therapy and azathioprine. On second day of management, abscess started to resolve and improvements in visual acuity, eye pain and headache were observed. VKH is a rare autoimmune disease that could also present with uncommon complications requiring a multi-specialty approach in the management to be able to control disease flares and prevent systemic complications.

eliannepearlsuarezgonzales@gmail.com

Global Experts Meeting on INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY February 27-28, 2019 Tokyo, Japan

A report of rate and antibiotic resistance patterns of global threatening bacteria in Iran

Leila Azimi, Shahnaz Armin, Fatemeh Fllah, Abdollah Karimi and Saeid Maham
Shahid Beheshti University of Medical Sciences, Iran

Antibiotic resistance is a worldwide health problem. Antibiotic resistance can increase rate of mortality and morbidity especially in immunosuppress patients like hospitalized one. Antibiotic-resistant infections add considerable costs to the nation's already overburdened health care system. Estimates regarding the medical cost per patient with an antibiotic-resistant infection range from \$ 18,588 to \$ 29,069 in 2015. The total economic burden placed on the US economy by antibiotic-resistant infections has been estimated to be as high as \$ 20 billion in health care costs. It can be considerable that making and introducing new antibiotics are very low because there is no economic justification because of early appearance of resistance. The most critical group of all includes multidrug resistant bacteria that pose a particular threat in hospitals, nursing homes and among patients whose care requires devices such as ventilators and blood catheters. They include *Acinetobacter*, *Pseudomonas* and various *Enterobacteriaceae* (including *Klebsiella*, *E. coli*, *Serratia* and *Proteus*). They can cause severe and often deadly infections such as bloodstream infections and pneumonia. WHO priority pathogens list for R&D of new antibiotics:

Priority 1: Critical

Acinetobacter baumannii, carbapenem-resistant

Pseudomonas aeruginosa, carbapenem-resistant

Enterobacteriaceae, carbapenem-resistant, ESBL-producing

Priority 2: High

Enterococcus faecium, vancomycin-resistant

Staphylococcus aureus, methicillin-resistant, vancomycin-intermediate and resistant

Priority 3: Medium

Streptococcus pneumoniae, penicillin-non-susceptible

So, in this report we explain about rate of present and also antibiotic resistance patterns of these global threatening bacteria in Iran as an Asian country.

leilaazimi1982@gmail.com

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Virulent characteristics of multidrug resistant *E. coli* from Zaria, Nigeria

Igwe J C¹, Olayinka B O², Ehnimidu J O² and Onaolapo J A²

¹Gombe State University, Nigeria

²Ahmadu Bello University, Nigeria

Most Multi Drug Resistant (MDR) *Escherichia coli* isolates (resistant to more than 3 classes of antibiotics) exhibit co-virulent characteristics that contribute to mortality and morbidity as a result of resistance to commonly prescribed antibiotics in the clinics. This study evaluated phenotypically some virulent characteristics in *E. coli* that contribute to the expressed MDR properties of *E. coli* using standard microbiological methods. 87 *E. coli* isolates were confirmed as *E. coli* from urinary tract infection and diarrhea patients in selected hospitals in Zaria, Nigeria using Microgene identification kit, out of which 58.6% (51) were observed to be MDR. Significant number of the MDR isolates (70.6% (36)) were extended spectrum beta-lactamase producers, 45.1% (23) were resistant to Cefoxitin and produce ampC. While further analysis on the isolates showed that 23.5% (12) were biofilm producers, 47.1% (24) were hetero resistant to Cefoxitin while 5.9% (3) produced carbapenemase. This study showed that most MDR *E. coli* from UTI and diarrhea could exhibit more than one virulent characteristic. Hence, isolates with MDR should be subjected to various tests in other to validate the mechanisms of resistance. This will encourage better treatment options and good periodic surveillance in prescription and dispensing of antibiotics in clinical settings.

Igwejames42@yahoo.com

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Psychosis in a hypothyroid: Is it really myxedema madness?

Mehvish Khan
USA

Symptoms of hypothyroidism mostly revolve around metabolic slowing. Neuropsychological symptoms referred to as myxedema madness can be found in 5-15% of myxedematous patients who have had total thyroidectomy, Hashimoto's thyroiditis or in patients non-compliant to medication. The association has been well described in some studies however the treatment options remain controversial. Despite the known association between hypothyroidism and psychosis, identification of a primary psychotic disorder maybe missed. A 71-year-old-male with history of depression, Post-Traumatic Stress Disorder (PTSD) and Hashimoto's disease presented with psychosis and bizarre behavior including belligerence for five months. Review of systems was negative. There was no known family history of psychiatric illness. Social history was positive for smoking. His prescribed medications included Clonazepam, Ambien and Armor thyroid which he was non-compliant to for over one year. Physical exam on admission revealed depressed mood, monotonous speech, disorganized thought process with flight of ideas, auditory hallucinations, poor motivation and insight. Urine toxicology was negative. Liver, metabolic and kidney functions were normal. Thyroid stimulating hormone was 89.9 mIU/ml, free thyroxine 0.25 ng/ml, free triiodothyronine 1.8 pg/ml, thyroid peroxidase antibody 103 IU/ml, anti-thyroglobulin antibody 34 IU/mL. Computed tomography of the head showed no acute findings. A diagnosis of myxedema psychosis was established and he was initiated with levothyroxine. The rest of his home medications were continued. Patient's psychosis improved in the next four days and he was discharged. He returned to the emergency room two days later with worsening auditory and visual hallucinations. He was then started on risperidone along with prazosin for PTSD. By day ten, his speech remained monotonous, thought process was disorganized and tangential. Insight remained poor however he no longer had auditory hallucinations or delusions. During his admission, records discovered at home revealed that he had an established diagnosis of schizophrenia, paranoid type which had been untreated for over twenty years. Once hypothyroidism is identified, delusions and hallucinations that characterize myxedema madness tend to remit in about one week of appropriate thyroid hormone supplementation. In this case, symptoms took a turn for the worse. Initiation of atypical antipsychotics at a low dose has appeared to be well tolerated. Psychiatric complaints in a known hypothyroid patient maybe misdiagnosed and labeled as neuroendocrine which may lead to delay in treatment for functional psychotic disorders. This case illustrates the importance of implementing antipsychotic treatment in an atypical presentation of a common medical condition.

mehv.khan9@gmail.com

Global Experts Meeting on INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY February 27-28, 2019 Tokyo, Japan

Osteoporosis: Update and emerging therapies

Mohammad Saifuddin

Dhaka Medical College and Hospital, Bangladesh

Osteoporosis is a growing major public health problem with impacts on quality and quantity of life that cross medical, social and economic lines. National Osteoporosis Foundation (NOF) estimates that 10.2 million Americans have osteoporosis and that an additional 43.4 million have low bone mass. More than 2 million osteoporosis-related fractures occur annually in the U.S.A. and more than 70% of these occur in women. Despite the availability of cost effective and well-tolerated treatments to reduce fracture risk, only 23% of women age 67 or older who have an osteoporosis-related fracture receive either a bone mineral density test or a prescription for a drug to treat osteoporosis in the six months after the fracture. Lifelong adequate calcium and vitamin D intake is necessary for the acquisition of peak bone mass and subsequent maintenance of bone health. Current FDA-approved pharmacologic options for the prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: Bisphosphonates (alendronate, alendronate plus D, ibandronate, risedronate and zoledronic acid), calcitonin, estrogens (estrogen and/or hormone therapy), estrogen agonist/antagonist (raloxifene), tissue-selective estrogen complex (conjugated estrogens/bazedoxifene), parathyroid hormone (PTH[1-34], teriparatide) and the RANKL inhibitor denosumab. Sequential treatment with anabolic therapy followed by an anti-resorptive agent is generally preferred. Combination therapy with teriparatide and an anti-resorptive can be considered in a few clinical settings in patients with very severe osteoporosis such as spine and hip fractures. There are few indications for combining two anti-resorptive treatments, but such options could be considered in the short-term in women who are experiencing active bone loss while on low dose HRT for menopausal symptoms or raloxifene for breast cancer prevention. Evidence of efficacy beyond five years is limited, whereas rare safety concerns such as ONJ and atypical femur fractures become more common beyond five years. Since there is no extensive evidence base to guide treatment duration decisions, duration decisions need to be individualized. After the initial three to five-year treatment period, a comprehensive risk assessment should be performed. This should include interval clinical history, particular with respect to intercurrent fracture history and new chronic diseases or medications, as well as height measurement, BMD testing and vertebral imaging if there has been any documented height loss during the treatment period. It is reasonable to discontinue bisphosphonates after three to five years in people who appear to be at modest risk of fracture after the initial treatment period. In contrast, for those who appear to be at high risk for fracture, continued treatment with a bisphosphonate or an alternative therapy should be considered.

saifk56dmc@yahoo.com

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Genetic diversity of Hepatitis C virus in Pakistan using next generation sequencing

Sana Saleem

University of the Punjab, Pakistan

In Pakistan, HCV disease is considered a major public health issue with about 10-17 million people suffering with this infection and rate is increasing every day without any hindrance. The currently available pyrosequencing approach is used to analyze complex viral genomes as it can determine minor variants. It is crucial to understand viral evolution and quasispecies diversity in complex viral strains. Intra-host viral diversity of HCV was determined using Next Generation Sequencing (NGS) from 13 chronically HCV infected individuals. NGS of three different regions (E2 (HVR1), NS3 and NS5B) of HCV-3a allowed for a comprehensive analysis of the viral population. Phylogenetic analysis of different HCV genes revealed great variability within the Pakistani population. The average nucleotide diversity for HVR1, NS3 and NS5B was 0.029, 0.011 and 0.010, respectively. Our findings clearly indicate that patient-2 had greater quasispecies heterogeneity than other patients of same genotype-3a using phylogenetic and one step network analyses. Initially phylogenetic analysis showed that genotype 3a samples have greater genetic diversity. However, no significant difference was determined when nucleotide variability of genotype 3a compared with other genotypes (1a, 1b, 2a and 4a).

sanacemb@yahoo.com

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Vitamin D deficiency and erectile dysfunction among men with type 2 diabetes

Shahjada Selim

Bangabandhu Sheikh Mujib Medical University, Bangladesh

The morbidity of men with diabetes and Erectile Dysfunction (ED) is becoming more increasingly recognized which has been taken to have association again with Vitamin D Deficiency (VDD). Thus, the aim of this nested case control study was to determine the association between vitamin D status and ED Bangladeshi adult men with type 2 diabetes (T2DM) which included 2860 patients (between 30 to 69 years). Among patients with normal vitamin D level, were categorized as control and those who had VDD, were grouped as the case. The study was conducted in diabetes care centers in Bangladesh. Socio-demographic, personal and family information were collected by face to face interview and disease-specific data were recorded from the patient's record book. Body weight, height, waist circumference, hip circumference and blood pressure were also recorded. Fasting blood samples were collected and serum levels of vitamin D, glucose and free testosterone were measured. The diabetes patients with ED has more severe VDD [(25 OH) D<10 ng/mL] than the controls (12% and 41%, respectively). The multivariate logistic regression analysis found that VDD [25(OH)D<20 ng/mL] to be associated with ED [OR 6.9 (95% CI: 2.9–15.8, p<0.001)]. Vitamin D level has positive linear association with glycemic control [OR 2.3 (95% CI: 1.7-5.9, p 0.003)] and with ED [3.6 (95% CI: 2.2–7.7, p 0.001)]. VDD is found to be an independent risk factor of ED in men with T2DM and severity of ED is linearly associated with the degree of deficiency of vitamin D.

selimshahjada@gmail.com

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Spectrum of non-diabetic hypoglycemia in a tertiary hospital-Nepal

Suman Baral, Vivek Pant, Matina Sayami, Jyoti Bhattarai and Pradeep K Shrestha
Tribhuvan University Teaching Hospital, Nepal

Introduction: Diagnosis of hypoglycemia in non-diabetics is challenging in most of the cases. The purpose of this study is to find the spectrum of etiology of hypoglycemia in non-diabetics in a tertiary hospital in a developing world with limited resources.

Materials and Methods: All patients admitted since June 2014 to June 2018 in the TUTH, Kathmandu for the evaluation of hypoglycemia were included in the study. Patients with diabetes and related hypoglycemia, bowel surgeries, sepsis, starvation and organ failure in whom the cause of hypoglycemia was obvious were excluded from the study. In remaining 21 cases proper history was taken and appropriate laboratory investigations were done.

Results: In 21 non-diabetic hypoglycemic patients, insulin autoantibody was positive in five, adrenal insufficiency in five, reactive hypoglycemia in four, insulinoma in four, drug induced excluding OHAs in two (hydroxychloroquine and ciprofloxacin) and Doege-Potter Syndrome in one case. Six had autoimmune disease (Grave's disease in four, SLE in one and RA in one case). Five cases were insulin autoantibody positive (except one with RA). Three out of five cases of adrenal insufficiency had Sheehan's syndrome. All four patients with reactive hypoglycemia were male presented for their concern about road traffic accident. Among cases of insulinoma one was female who also had associated primary hyperparathyroidism possibly MEN 1 syndrome.

Conclusion: Insulin autoantibody related followed by Sheehan's syndrome remains the commonest cause of hypoglycemia in female while reactive hypoglycemia is the commonest in male.

suman.baral@iom.edu.np

Global Experts Meeting on
INFECTIOUS DISEASES, DIABETES AND ENDOCRINOLOGY
February 27-28, 2019 Tokyo, Japan

Visit-to-visit systolic blood pressure variability predicts vascular complications in diabetes

Peh Seng Lee Daryl

Lee Kong Chian School of Medicine-Nanyang Technological University, Singapore

Background & Aims: Hypertension is a strong predictor of major adverse vascular complications. There is limited evidence with regards to visit-to-visit variability in the blood pressure (BP-CV) and association with vascular risk in diabetes. Thus, we studied the association of BP-CV with cardiac and cerebrovascular events (MACCE) and nephropathy in diabetes.

Methods: In a retrospective study of 765 consecutive diabetes patients with documented BP values at consecutive visits (January 2013-December 2014) from a diabetes center in Singapore, BP-CV was assessed using Coefficient of Variation (CV) and percentage CV values were derived by dividing the Standard Deviation (SD) by the mean. Composite renal endpoint was defined as the progression of albuminuria or decline of estimated Glomerular Filtration Rate (eGFR). Multivariable logistic regression and Cox proportional hazards models were built to study associations of BP-CV (systolic (SBP), diastolic (DBP) and pulse (PP) with composite renal endpoint and MACCE after adjusting for age, gender, ethnicity, BMI, baseline eGFR, baseline HbA1c and baseline Systolic BP.

Results: During a mean (SD) follow up period of 32 (6) months, there were 76 (9.93%) deaths, 102 (13.33%) MACCE events and 84 (12.35%) had progression of kidney disease. SBP-CV predicted composite renal endpoint (Adjusted OR=1.04, 95% CI 1.01–1.07, $p=0.018$). Higher SBP-CV but not DBP-CV predicted risk of MACCE (Adjusted HR=1.03, 95% CI 1.01–1.05, $p=0.007$) and PP-CV predicted MACCE (Adjusted HR=1.03, 95% CI 1.01–1.04, $p=0.001$). Patients who had SBP-CV values lower than the 8% cut-off and PP-CV values lower than the 21% cut-off had significantly better overall survival and MACCE free survival (log rank $p<0.05$).

Conclusion: Visit-to-visit variability in BP serves as a good prognostic surrogate marker of MACCE and nephropathy in diabetes patients. We need pragmatic randomized clinical trials to assess whether attaining stable BP by therapeutic measures results in improvement in vascular complications.

Pehsengleedaryl@gmail.com