Tentative Program

International Conference on

Genetic Counseling and Genomic Medicine

December 07-08, 2016 Madrid, Spain



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Genomic Medicine 2016

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Program at A Glance

Day 1

Morning Sessions	Reception/Registration	08.00-09.00	
		Time	General Session
	Least of 3 Keynote/Plenary Talks	09.00-09.15	Inaugural Address
		09.15-09.45	Keynote/Plenary Talk 1
		09.45-10.15	Keynote/Plenary Talk 2
		10.15-10.45	Keynote/Plenary Talk 3
	Panel Discussions/Group Photo		
	Coffee/Tea Break 10.45-11.00 (Networking)		
	11.00-12.40	Genomic medicine	
	Speaker Slots Available		
	Lunch Break 12.40-13.30		
Evening Sessions	13.30-15.30	Genetic counseling	
	Speaker Slots Available		
	Coffee/Tea Break 15.30-15.45 (Networking)		
	15.45-17.25	Workshop	

Day 2

	Time	Session 1	Session 2
Morning Sessions	09.00-10.40	Keynote Forum	Molecular Medicine
	Coffee/Tea Break 10.40-10.55 (Networking)		
	10.55-12.35	Cytogenetics	Tumor Markers
	Speaker Slots Available		
	Lunch Break 12.35-13.25		
Evening Sessions	13.25-15.05	Tissue Engineering	Genetically modified organisms
	Speaker Slots Available		
	Coffee/Tea Break 15.05-15.20 (Networking)		
	15.20-17.00	Evolution of Novel Genes	Clinical applications and diagnostics
	Awards & Closing Ceremony		

NOTE: Program Shedule is subject to change with final allotment of the speaker slots

Glimpses of Conferences

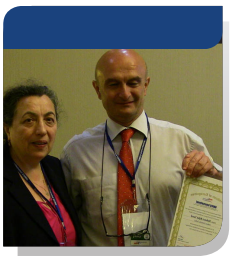




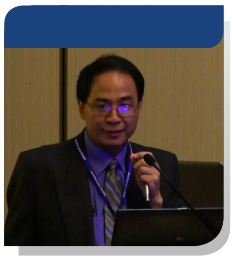






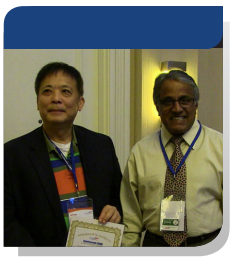








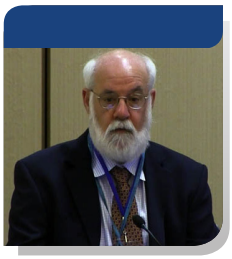


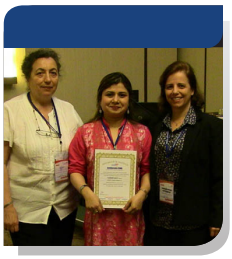



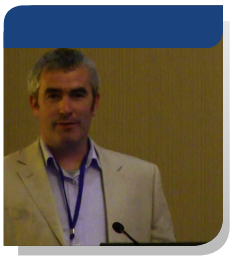













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Biography

A pioneer in human somatic cell therapy, Professor Peter K. Law is the Founder of human genome therapies using human myoblasts. He obtained his Ph.D. from the University of Toronto and postdoctorate from McMaster University. He has over 200 publications in reputed journals and has served on the editorial boards of many. He is currently the Founder and Chairman of the Cell Therapy Institute in Wuhan, CHINA, and the Editor-in-Chief of the Open Journal of Regenerative Medicine.

Abstract

Human Myoblast Genome Therapies Alleviate Disease Conditions in Hereditary Muscular Dystrophies, Cardiomyopathy, Type-II Diabetes, Cancer, and Aging

Peter K. Law
Cell Therapy Institute, Wuhan, China

Myoblast implantation is a unique, patented technology of muscle regeneration being tested in Phase III clinical trials of muscular dystrophy, ischemic cardiomyopathy, Phase II trial of cancer, and Phase I trial of Type II diabetes. Differentiated and committed, myoblasts are not stem cells. Implanted myoblasts fuse spontaneously among themselves, replenishing genetically normal myofibers. They also fuse with genetically abnormal myofibers of muscular dystrophy, cardiomyopathy, or Type II diabetes, transferring their nuclei containing the normal human genome to provide stable, long-term expression of the missing gene products. They develop to become cardiomyocytes in the infracted myocardium. Myoblasts transduced with VEGF165 allows concomitant regeneration of blood capillaries and myofibers. They are safe and effective biologics for treating heart failure, ischemic cardiomyopathy, diabetic ischemia, and potentially for erectile dysfunction and baldness. Myoblasts have been shown to induce cancer cell apoptosis in solid tumors. Myoblasts, because of their small size, spindle shape, and resilience, can grow within wrinkles and on skin surfaces, thus enhancing the color, luster and texture of the skin “plated” with them. They can be injected subcutaneously as a cellular filler to reduce wrinkles. Intramuscular injection of myoblasts can augment the size, shape, consistency, tone and strength of muscle groups, improving the lines, contours and vitality to sculpt a youthful appearance. This highly promising technology has great social economic values in treating hereditary, fatal and debilitating disease conditions.

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Wenhui Laura Li, PhD, FACMG, Assistant Professor at the University of Southern California Keck School of Medicine, works as an Associate Director of Molecular Pathology and Genetics at Children's Hospital Los Angeles, Los Angeles, California in USA. She was born in Beijing, China and graduated from Beijing Normal University (1992). Then she received M.S. in Cell Biology from Fordham University (1994) and Ph.D. in Molecular Biology & Genetics from Johns Hopkins University (2000). She did a fellowship at California Institute of Technology studying the molecular mechanism behind Bloom's syndrome

Abstract

Sensitive and Comprehensive Next-Generation Sequencing Method to Detect RB1 Mutations Improves Care for Retinoblastoma Patients and Their Families

W. Li, J. Buckley, P. Sanchez, D. Maglinte, L. Viduesky, T. Triche
Pathology and Laboratory Medicine, Children's Hospital Los Angeles, Los Angeles, CA.

Retinoblastoma is childhood eye cancer caused by inactivating mutations in both alleles of the tumor suppressor gene, RB1. RB1 is the only gene in which mutations are known to cause heritable predisposition to retinoblastoma. Retinoblastoma can lead to the loss of vision, eye(s), and sometimes even life. Molecular identification of a germline RB1 mutation in a timely manner is very important for the effective care and management of retinoblastoma patients and their families. However, current methods to detect disease causal mutations in RB1 are lengthy, usually taking weeks or months. In this study, we report a next-generation sequencing (NGS) based method that is capable of capturing pathogenic mutations in the entire 180 kb RB1 gene, both exons and introns. The process of DNA extraction, sequence data generation, and completion of data analysis requires only 3 days. In addition, the associated bioinformatic pipeline can take NGS data and accurately measure the copy number of the RB1 gene and MYCN gene, thus enabling the NGS method to simultaneously detect point mutations, small InDels and large deletion/duplications in the RB1 gene and gene amplification of the MYCN gene on a single test platform, which was impossible previously. Because of the deep sequencing coverage of the entire RB1 gene, this method can detect even a low percentage of mosaic mutations directly from blood samples, which is essential for genetic counseling of retinoblastoma patients and their families. Indeed, during two years of clinical testing of retinoblastoma, we have numerous cases that carry low level of mosaic mutations that might be missed by routine Sanger sequencing method. Taken together, we believe that this NGS based methods can lead to rapid, inexpensive, comprehensive, and sensitive methods for detecting RB1 mutations and MYCN amplifications. This in turn will enable detection of germ line carriers (particularly important in patients with unilateral disease who were traditionally assumed to be sporadic cases) who are at lifetime increased risk of a second malignancy like osteosarcoma, a decidedly more aggressive and more often fatal disease compared to retinoblastoma.

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Biography

Kira Astakhova is an Associate Professor in the Department of Physics, Chemistry and Pharmacy at the University of Southern Denmark where she has been a faculty member since 2012. She holds PhD in Bioorganic Chemistry and Professorship in Computational Synthetic Biology. Kira completed her Ph.D. at Institute of Bioorganic Chemistry, Moscow, Russia, and her undergraduate studies at Higher Chemical Colledge of Russian Academy of Sciences. Her research interests lie in the area of intermolecular recognition, ranging from theory to design and implementation, with a focus on improving diagnostic assays and fundamental understanding on biomolecular interactions.

Abstract

Novel tools for highly efficient detection of nucleic acids - Going beyond amplification

Kira Astakhova,
Nucleic Acid Center, Department of Physics, Chemistry and Pharmacy,
University of Southern Denmark, Denmark

Detection and studies of nucleic acids (DNA and RNA) are highly desirable in modern research, biotechnology and clinical assays. Owing to improved biological activity and stability artificial nucleic acids have much to offer as diagnostic and research tools. However, so far the detection of nucleic acids has been fully relied on enzymatic amplification of targets. In our research we aim at enzyme-free detection and studies of DNA and RNA. To do this, we develop novel design tools and synthesis of efficient fluorescent probes with improved properties for detection of nucleic acids. In my talk I will present our recent findings in the development of oligonucleotide probes and assays that allows to detect long natural DNA and RNA molecules at ultra-low concentrations. In particular, enzyme-free detection of EBOLA RNA using our new approach will be described.

Naturally occurring nucleic acids are typically present as super-coiled molecules in complex biological media and often at very low concentrations. This makes them challenging objects for detection which require ultra-sensitive and specific oligonucleotide probes. The novel probes and assays which we develop could become a new approach to rapid, reliable and enzyme-free detection of viral and other nucleic acids. Importantly, stoichiometry of detected targets will be conserved in the enzyme-free assay, which allows for an accurate studies and estimation of e.g. mutation abundance when the detection limit requirement is met. Using fluorescence microscopy, this could become a new approach to detect and investigate DNA at single-molecule resolution and directly in the biological sample of choice.

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Biography

Krystina Parker is specialist in internal medicine with ten years of experience. In the last five years she has been a consultant in the nephrology departement of Akershus University Hospital. She is currently working on her Ph.D. at the University of Oslo which includes teaching medical students at various stages of their study. She is co-author in various projects including "Increased levels of inflammatory mediators and proinflammatory monocytes in patients with type I diabetes mellitus and nephrology" and "Glucarpidase (Carboxypeptidase G2) Intervention in Adult and Elderly Cancer Patients with Renal Dysfunction and Delayed Methotrexate Elimination After High-Dose Methotrexate Therapy".

Abstract

Relationship between cytochrome P450 polymorphisms and prescribed medication in elderly haemodialysis patients

Krystina Parker
Akershus University Hospital and University of Oslo, Norway

Background Elderly patients on haemodialysis treatment have polypharmacy. The drug response can be influenced by age, smoking, as well through the genetic variations in the cytochrome P450 (CYP) enzymes system. More than 80% of all prescribed drugs are metabolized by the CYP enzymes. The aims of this study were to describe the prevalence of polymorphism in three CYP isoenzymes and the relationship between CYP polymorphism and prescribed drugs.

Methods Fifty-one elderly haemodialysis patients aged ≥65years were included. CYP-genotyping was carried out in whole blood by a real-time PCR method for detecting common variant alleles in CYP2C9, CYP2C19 and CYP2D6. The allele frequencies were calculated using the Hardy-Weinberg equation.

Results The overall prevalence of CYP polymorphisms (heterozygous and homozygous) was 77%. The prevalence of heterozygous carriers of variant alleles coding for defective CYP2D6, CYP2C9 and CYP2C19 was 64%, 22% and 55%, respectively; the prevalence of homozygous carriers was 6% for each of the CYP2D6, CYP2C9 and CYP2C19 enzymes. The prevalence of the CYP2D6*6, CYP2D6*9 and CYP2D6*41 variant alleles did not differ from that in a European Caucasian reference population (p=0.31). Twenty-three patients (45%) had at least one CYP mutation and used drugs that are metabolized by the CYP isoenzymes. Metoprolol and proton-pump inhibitors were the most commonly used drugs that could be affected by a heterozygous or homozygous mutation.

Conclusions Polymorphisms of CYP2C9, CYP2C19 and CYP2D6 are common in elderly haemodialysis patients. Many of these patients have a phenotype with altered CYP enzyme activity and could benefit from close drug monitoring.

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Biography

Hiroyoshi Hattori is a pediatric oncologist and has completed his PhD in 2002 Kyushu University in Japan after 5 year clinical training. Then he had postdoctoral studies in Cambridge University in UK, Department of Oncology. His post doc work was about 'synthetic lethality', therapeutic approach by targeting a cancer specific genetic alteration based on DNA damage/repair mechanisms. He moved in japan and is now engaged in genome analysis of osteosarcoma and genetic counseling as a physician scientist.

Abstract

Medical care for the pediatric patients with Li-Fraumeni Syndrome in Japan – A Single Institute's Experience

HATTORI Hiroyoshi, TSUCHIMOCHI Taichiro, HANADA Yu, AKITA Nobuhiro, SEKIMIZU Masahiro, ICHIKAWA Mizuho, FUTAMURA Masaki, MAEDA Naoko, GOTO Masahiko, HORIBE Keizo

Departments of Pediatrics, National Hospital Organization Nagoya Medical Center, Nagoya 460-0001, Japan

Genetic testing and surveillance for pediatric patients with family cancer syndromes, especially Li-Fraumeni syndrome (LFS), have had many issues.

We reviewed the family histories up to second degrees in 61 patients with solid tumors who were treated from 2009 to 2016 at the pediatric ward in our hospital. The median age was 13 year and the range was from 1 month to 24 year, including 27 male and 34 female. The diagnoses were 29 osteosarcomas, 27 soft tissue sarcomas and 5 brain tumors. Fifty-three localized and 8 metastatic tumors were contained. Three patients were agreed with LFS criterion and all developed osteosarcomas. First patient received the genetic testing and the counselling. Second patient's father had hoped to have the genetic counselling at the diagnosis but lost the motivation afterwards. For third patient, the relapse of the disease created an opportunity to make his mother to have a genetic counselling. No cancer history was observed in the siblings except LFS families.

It's been difficult to detect LFS tumors in the presymptomatic children since the different types of cancer onset at different time. However, the recent progress of diagnostic techniques such as whole-body MRI could provide therapeutic benefit by detecting LFS cancers at early phase. Some parents still hesitate to discuss the inheritable character of their children disease in Japan. Clinical guidelines for genetic testing and surveillance in the pediatric LFS patients should be established by taking into account the Japanese way of thinking against the heritable cancer.

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Biography

Dr Melissa Noke completed her PhD in 2015 in the School of Psychological Sciences at The University of Manchester and is currently completing postdoctoral studies at The University of Manchester. In 2015, she was awarded the Sue Fielder Memorial Prize for outstanding academic achievements for her PhD Thesis.

Abstract

Children's adaptation to their sickle cell carrier status: A dyadic qualitative study with parents and children

Dr Melissa Noke
School of Psychological Sciences, The University of Manchester, Manchester, UK

It is expected that due to technological advances, access to information about children's genetic susceptibility to illness, genetic diseases, and carrier status will expand at an unprecedented rate in the near future. This has resulted in renewed consideration of the psychosocial impact of carrier identification on children's wellbeing, particularly in the context of newborn screening, which annually identifies the sickle cell carrier status of 9,300 newborns in the UK and 55,200 newborns in the US. Although there are concerns internationally that carrier identification could lead to stigmatization and psychosocial harm, little is known about young children's emotional adaptation. This dyadic qualitative study explored how parents and children communicate about carrier results and how children understand, and adapt to, their status. Semi-structured interviews were undertaken with parents (n=7) and write-and-draw interviews conducted separately with their children (n=7) (6-11years). Data were analyzed using thematic analysis to explore themes within and between each dyad. Parents explained basic information, but did not further converse with children about their status following the initial disclosure. Consequently children had difficulty making sense of the information. Although parents did not believe that children were adversley affected, children experienced general emotional affect and anxiety about becoming unwell or being victimized by peers which resulted in withdrawal and distraction in school, nightmares, and hypervigilance to bodily symptoms. Children desired support from medical professionals to alleviate anxities. The importance of providing further support following newborn screening to aid open discussion in families and ameliorate children's anxities is highlighted.

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Olga Brovkina has completed her PhD at the age of 23 years from State Research Center GosNIIgenetika. Now she is a postdoctoral fellow in the genetic laboratory of Government scientific clinical center of federal medical and biological agency of Russia. She has published 4 papers in reputed journals on russian language.

Abstract

A performance comparison PCR-based approaches for EGFR mutations status detection in plasma and FFPE tissue of patients with advanced NSCLC

Brovkina O.I., Gordiev M.G., Gusev O.A., Nikitin A.G., Khodyrev D.S.
Government scientific clinical center of federal medical and biological agency of Russia (Moscow, Russia)

The presence of activating mutations in the EGFR gene is a prognostic marker of susceptibility to target therapy by tyrosine kinase inhibitors (TKI). Now it is possible to determine in the plasma activating mutation in 19-21 exon as well as T790M mutations in exon 20, which is marker refractory to TKI. The aim of this study was to compare mutation status in FFPE tissue and plasma samples and the evaluate diagnostic characteristics of real-time wild-type blocking PCR (LNA-clamp) assay, digital PCR approach (dPCR) and routine approaches, which are used for tissue analysis – Sanger sequencing and real–time PCR. The study included 89 patients with advanced NSCLC with known mutation status in FFPE tissue. L858R, del19 and T790M mutations were determined in corresponding blood plasma samples. Sanger sequencing and real–time PCR revealed sensitivity in plasma samples less than 20%. Comparison of the EGFR mutations status in plasma by LNA-clamp real-time PCR and dPCR and tumor revealed concordance 88,7% [95% CI: 85–92%], sensitivity – 83.3% [95% CI: 76–90%], specificity – 100%. Comparison of these two PCR approaches revealed 100% concordance of results in plasma samples, despite the higher analitical capabilities of dPCR, that was recieved with artificial plasmid positive controls application, it was shown a potential of relieble detection of cDNA with mutation amount less than 1% (5-10 copies mutant gene per reaction) with excess background of wild type DNA (ratio DNA mutation to wild-type DNA 1: 10000).

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Biography

The Institute of Experimental Pathology, directed by Prof. Juergen Brosius, performs basic research in Molecular Genetics and Evolution.

Abstract

From Eden to a hell of uniformity? Directed evolution in humans

Jurgen Brosius
The Institute of Experimental Pathology

For the first time during evolution of life on this planet, a species has acquired the ability to direct its own genetic destiny. Following 200,000 years of evolution, modern man now has the technologies not only to eradicate genetic disease but also to prolong life and enhance desired physical and mental traits. These technologies include preimplantation diagnosis, cloning, and gene therapy in the germline on native chromosomes or by adding artificial ones. At first glance, we should all be in favor of eliminating genetic diseases and enhancing genetic traits. Evolutionary considerations, however, uncover hidden dangers and suggest caution against the total embracement of such actions. The first major concern is that the genome will never be a completely reliable crystal ball for predicting human phenotypes.This is especially true for predictions concerning the performance of alleles in future generations whose populations might be subjected to different environmental and social challenges. The second, and perhaps moreimportant, concern is that the end result of germline intervention and genetic enhancement will likely lead to the impoverishment of gene variants in the human population and deprive us of one of our most valued assets for survival in the future, our genetic diversity.

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Laura Sagle received her Ph.D. from UCSD in 2006 working with Professor Floyd Romesberg at the Scripps Research Institute. Her PhD work involved the development of a new site-selective folding technique using infrared probes in proteins. Dr. Sagle then did postdoctoral research with Professor Paul Cremer at Texas A&M University, which investigated the role of small molecule stabilizers and denaturants on protein-mimetic polymers using microfluidics and sum frequency generation spectroscopy.

Abstract

Multiplexed plasmonic DNA chips for the screening of an HuR protein-RNA binding inhibiter

Jie He,1 George Yoshida,1,2 Michelle Boegli,1 Celeste Bulach,1 Andrew Gabanic,2 Michael Tranter,2 and Laura Sagle1
1 Department of Chemistry, University of Cincinnati
2 Division of Cardiovascular Health and Diseases, University of Cincinnati College of Medicine

Human antigen R, HuR, is an RNA binding protien that can regulate eukaryotic posttranscriptional gene expression and has recently been shown to play an important role in cardiac physiology and pathology. Since this protein is a new target for cardiac hypertrophy, drug screening involving the inhibition of the protein-RNA interaction has been limited. Herein, we develop a multiplexed, colorimetric assay for screening small molecule inhibiters of the HuR-RNA binding interaction. This assay involves a 96-spot plate containing patterned, uniform nanoparticle arrays in each spot, and is compatible with standard UV-Vis microplate readers common to most laboratories. Each spot is functionalized with a DNA probe, which binds a RNA strand containing a unique hairpin motif recognized by the HuR protein. Upon binding the HuR protein to the RNA-DNA complex, a shift in the localized surface plasmon resonance of the nanoparticles occurs producing a rapid-readout change in color. Since the binding of a small-molecule inhibiter prevents HuR binding, screening for inhibiters can be carried out through this simple, label-free, colorimetric assay. Using this assay, close to 100 molecules were screened resulting in lead compounds as HuR drug candidates. In addition to drug screening, these patterned nanoparticle-based arrays should find tremendous use in genetic screening and pathogen detection.

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Biography

Dr Boucher completed her undergraduate medical training at Cardiff University and is currently undertaking an MSc in child health at the University if Warwick alongside her Paediatric training. She is a run through Paediatric trainee with the West Midlands deanery currently in her 5th year of Paediatric training applying to sub-specialise in Neonataology.

Abstract

Confined placental mosaicism – an unexpected genetic result

Lucy Boucher
University Hospital of Coventry and Warwickshire, Clifford bridge road, Coventry

Introduction
Pre-natal cytogenetic results of uncertain significance pose an ethical conundrum. Confined placental mosaicism (CPM) is a specific form of constitutional mosaicism that is isolated to the placental tissue creating a discrepancy between the makeup of the cells in the foetus and the cells in the placenta with different clinical phenotypes and prognosis. The significance of these findings are uncertain.

Case description
37 year old gravida 8 para 3+4, known DMD carrier. DCDA twin pregnancy. CVS performed at 10 weeks showed an unaffected male foetus and a female foetus with incidental finding of mosaic trisomy 12. Amniocentesis was indicated but declined. Detailed anomaly scans of both twins were normal however the female twin developed oligohydramnios and IUGR from 20 weeks.Post natal examinations were normal, however prior to discharge blood and skin samples were taken for Karyotype as well as undertaking an ECHO for cardiac defects.
The karyotype performed postnatally did not identify any trisomic cells and therefore CPM was diagnosed.

Discussion
Whilst in some studies CPM has been identified as being a possible cause of IUGR and oligohydramnios as well as having some impact on mortality and morbidity, this area is not well researched and the clinical importance of these finding is uncertain.In this instance ethical questions are raised as to whether the prenatal investigation should have been limited to the specific questions of DMD avoiding a potentially clinically insignificant result. Unexpected results of uncertain significane pose problems for pre-natal counselling and may lead to parents being offered invasive and potentially unnecessary investigations exacerbating parental anxiety.

Biography

Koshi Mimori is presently working as a professor in Department of Surgery, Kyushu University Beppu Hospital and his Research Interests are Genetic and epigenetic clonal evolution of colorectal cancer cells, Clarification of the non-coding RNA / gene pathway regulating metastatic cascade in gastrointestinal tract cancer cases.

Abstract

Integrated Multiregional Analysis Proposing a New Model of Colorectal Cancer Evolution

Hiroyuki Aburatani6, Seishi Ogawa7, Satoru Miyano4, Koshi Mimori1
1 Department of Surgery, Kyushu University Beppu Hospital, Beppu, Japan, 2 Department of Otorhinolaryngology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan,
3 Department of Gastroenterological Surgery, Graduate School of Medicine, Osaka University, Suita, Japan

Understanding intratumor heterogeneity is clinically important because it could cause therapeutic failure by fostering evolutionary adaptation. To this end, we profiled the genome and epigenome in multiple regions within each of nine colorectal tumors. Extensive intertumor heterogeneity is observed, from which we inferred the evolutionary history of the tumors. First, clonally shared alterations appeared, in which C>T transitions at CpG site and CpG island hypermethylation were relatively enriched. Correlation between mutation counts and patients' ages suggests that the early-acquired alterations resulted from aging. In the late phase, a parental clone was branched into numerous subclones. Known driver alterations were observed frequently in the early-acquired alterations, but rarely in the lateacquired alterations. Consistently, our computational simulation of the branching evolution suggests that extensive intratumor heterogeneity could be generated by neutral evolution.

Biography

Anna Aghajanyan has graduated from the Erevan State University, Erevan, Armenia. She has completed Ph.D. from Department of Ecological Genetic (Program Genetic and Radiobiology), N.I. Vavilov Institute of General Genetics Russian Academy of Sciences, Moscow, Russia. She has been the senior research assistant in Laboratory of Molecular Biology and Cytogenetic Federal State Institution "Russian Scientific Center Roentgen-Radiology" Ministry of Health, Moscow, Russia. Now, she has senior lecturer in Department of Biology and General Genetics, Institute of Medicine, RUDN University, Moscow, Russia. She has published more than 21 papers in reputed journals.

Abstract

Transgenerational genomic instability in children of irradiated in low doses parents

Anna Aghajanyan
Institute of Medicine, RUDN University, Moscow, 117198, Russia

The actual problem for modern medicine is the genetic risk of human exposure assessment in not only mutations, but also long-term effects - induced transgenerational genomic instability in the somatic cells of offspring's of irradiated in low doses parents. The problem the genetic risk assessment is especially important for children who are particularly at risk due to the rapid growth and development of an organism, lack of balance of regulatory and protective mechanisms, imperfection of immunity. Many years, we have been carrying out complex examinations of children with various pathologies. There were significantly increased average frequency of aberrant genomes in children as compared to control group. In most of the children carrying the repair activity of genomic DNA induced by γ- and UV-irradiation is lower. In the majority of children, combinations of deviations affecting different types of immunity were observed. The obtained results may specify on the trasgenerational genomic instability in this children. The basis of genomic instability may be the potential DNA lesions that do not lead to the death of cells/apoptosis. They can persist in subsequent cell divisions as DNA breaks and result in alterations in DNA conformation, chromatin structure and function, and gene regulation leading to mutation, chromosome aberrations, or disruption of epigenetic processes. Therefore, the overall genomic make-up of the offspring is influenced by multiple aspects inherited from maternally and paternally, including genotype as well as inherited DNA damage and epigenetic modifications. These events may be the cause of increased morbidity.

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Biography

Hend AbdelGawad Shakshouk now has just started her last clinical year at the faculty of medicine, Alexandria University, Egypt. She passes every year with excellent with honors degree. She realized early her passion for molecular biology and genomic medicine as it could be the only hope for many patients. She wrote her first article review about stem cells and breast cancer which has been accepted for publication. Then she joined the stem cell research team at the faculty of medicine, Alexandria University, Egypt, where she can start actual clinical trials on animals and fulfill the dream.

Abstract

Can mesenchymal stem cells be used as a future weapon against breast cancer?

Hend AbdelGawad Shakshouk
Alexandria faculty of medicine, Egypt

Background
Mesenchymal stem cells (MSCs) are recruited to the stroma of cancers. They interact with cancer cells to promote invasion and metastasis or to suppress tumor growth. The unique tumor-homing capacity of MSCs makes them a promising vehicle to deliver various anticancer agents.
Aim
The aim of this study was to detect the possibility of using mesenchymal stem cells as a future weapon against breast cancer.
Methods
PubMed, PubMed central, Springer and Cochrane databases were searched using specified terms.
Results
Literature search yielded 17 manuscripts: seven of which suggested the use of MSCs in breast cancer therapy, while six studies raised the possibility that MSCs may promote tumor growth and four other studies assumed a dual role for MSCs.
Conclusions
The role of MSCs in breast cancer therapy is still debatable. We recommend future research in the field of MSCs in Alexandria University as it is our hope in the fight against breast cancer.
Keywords
Mesenchymal stem cells (MSCs);Breast cancer; Genetically modified MSCs; Interferon beta (IFN-β); Interleukin-18 (IL-18); Conditionally replicating adenoviruses (CRAds)
.

Biography

M Amlung has completed his PhD in 1998 in Chemistry at Saarland University and has been working since 1996 at INM – Leibniz-Institute for New Materials in Saarbruecken as Scientific Officer.

Abstract

Circulating cell free DNA as a predictor of systemic lupus erythematosus severity and monitoring of therapy

Olfat M. Hendy a,*, Tawfik Abdel Motalib b, Mona A. El Shafie c, Fatma A. Khalaf d, Sobhy E. Kotbe, Aziza Khalil f, Salwa R. Ali g

a Department of Clinical Pathology, National Liver Institute, Menoufiya University, Egypt
b Department of Microbiology, National Liver Institute, Menoufiya University, Egypt
c Department of Clinical Pathology, Menoufiya Faculty of Medicine, Egypt

Introduction: Glass-like coatings are used due to their excellent properties in a broad application field like drug delivery systems or as implant coating for bone repair. However these glass-like coatings can only be generated at relatively high temperatures that limit their application in temperature-sensitive areas. Therefore, new developments and further research is going on to provide useful coatings also in these fields, e.g., as coating for cardiovascular implants.

Methods: Two glass-like coatings have been developed and characterized. These coatings have been applied using the well-known sol-gel-technique and tempered at moderate temperatures in different atmospheres. Afterwards the biocompatibility using human umbilical vein endothelial cells (HUVEC) has been investigated.

Results: The developed glass-like coatings possess excellent optical, chemical, and biological properties. By altering the existing sintering atmosphere, the cellular growth could be selectively influenced in a positive and a negative way. Additionally the coatings have been proven to be of radiolucent nature that makes them attractive for different fields.

Conclusion: The developed glass-like coatings are promising coatings for a later cardiovascular application. A later usage as closing layer on thin, fine, and sensitive wires like stents is cogitable. First and foremost these coatings can contribute in a better acceptance of an implant in the human body.

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International Conference on

Genetic Counseling and Genomic Medicine

December 07-08, 2016 Madrid, Spain

Biography

Dina A. Ghroaba has completed her M.Sc. in Biochemistry/ Molecular Diagnosis of Genetic Diseases From Ain Shams University. Her Researches aim to serve Diagnostic Genetics, Gene-Based Therapeutics and she has been serving as an editorial board member of repute.

Abstract

Mutation analysis of methylmalonyl CoA mutase gene exon 2 in Egyptian families: Identification of 25 novel allelic variants

Dina Abdelazim Ghazy Ghoraba
Faculty of Medicine, Cairo University, Cairo, Egypt

Methylmalonic aciduria (MMA) is an autosomal recessive disorder of methylmalonate and cobalamin (cbl; vitamin B12) metabolism. It is an inborn error of organic acid metabolism which commonly results from a defect in the gene encoding the methylmalonyl-CoA mutase (MCM) apoenzyme. Here we report the results of mutation study of exon 2 of the methylmalonyl CoA mutase (MUT) gene, coding MCM residues from 1 to 128, in ten unrelated Egyptian families affected with methylmalonic aciduria. Patients were presented with a wide-anion gap metabolic acidosis. The diagnosis has established by the measurement of C3 (propionylcarnitine) and C3:C2 (propionylcarnitine/acetylcarnitine) in blood by using liquid chromatography–tandem mass spectrometry (LC/MS–MS) and was confirmed by the detection of an abnormally elevated level of methylmalonic acid in urine by using gas chromatography–mass spectrometry (GC/MS) and isocratic cation exchange high-performance liquid-chromatography (HPLC). Direct sequencing of gDNA of the MUT gene exon 2 has revealed a total of 26 allelic variants: ten of which were intronic, eight were located upstream to the exon 2 coding region, four were novel modifications predicted to affect the splicing region, three were novel mutations within the coding region: c.15G > A (p.K5K), c.165C > A (p.N55K) and c.7del (p.R3EfsX14), as well as the previously reported mutation c.323G > A (p.R108H).

Biography

He is presently working as Professor of Medicine, JSS University Medical College, Mysore, India. He Published more than 15 papers.

Abstract

Evaluation and comparison of Biomarkers in Heart failure

Dr K A Sudharshana Murthy, Professor
Dr H G Ashok, Associate Professor
Dr A N Aparna, former Junior Resident
Department of General Medicine
JSS University Medical college, Mysore

Heart failure (HF) is a syndrome, rather than a primary diagnosis, which results from any structural or functional cardiac disorder that impairs the ability of the heart to support the physiological circulation. Unfortunately, there is no single diagnostic test for HF and the accuracy of diagnosis by clinical means only (i.e. a combination of history, physical examination and appropriate investigations) is often inadequate. Although natriuretic peptides have been shown to be reliable diagnostic and prognostic tools, the extent to which these markers could be used as aids in the titration of medical therapy for chronic heart failure remains uncertain. There is an increasing interest in the development of new biomarkers in evaluation of heart failure, and a great number of laboratory tests have recently been proposed. Studies in which biomarkers are compared are lacking.

Despite the publication of evidence based guidelines the current care of patients with Heart Failure remains suboptimal. Cost effectiveness and easy availability of biomarkers should help in improving this situation. Head to head comparison of biomarkers in HF and their utility in diagnosis, assessing severity and predicting mortality will make evaluation of biomarkers in HF more popular. Hence we evaluated and compared available and cost effective biomarkers.

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Biography

El Hassan sefrioui obtained his PhD in Medical Science from Leuven University (Belgium) and postdoctoral studies from California San Diego University School of Medicine (USA). He is the director of Medical Biotechnology Centre at the Moroccan Foundation Fo Advanced Science Innovation & Research (MAScIR). He has published 10 patents and 30 papers in reputed journals and has been serving as an editorial board member of sev eral peereviewed journals.

Abstract

Novel RT-qPCR multiplex diagnotic assay for for the quantification of leukemia associated BCR-ABL1 translocation

El Hassan SEFRIOUI
Moroccan Foundation For Advanced Sciences Innovation & Research (MAScIR), Rabat, Morocco

Monitoring BCR-ABL1 translocation has become a well established clinical practice in the management of chronic myeloid leukemia (CML). However, the detection limit of the BCR-ABL1 transcripts, particularly after treatment, still needs more standardization. The present study evaluated the clinical performances of a novel molecular assay for the quantification of BCR-ABL1 in CML patients. The assay, developed by the MASCIR medical biotechnology, is based on the real time quantitative PCR (qPCR) in multiplex format (detection of BCR-ABL1 fusion transcripts (e13a2 and e14a2) and ABL1 in a single reaction). In a retrospective comparative clinical study performed in an international reference laboratory, RNA was extracted from a group of selected 48 CML patient blood samples with various BCR-ABL1/ABL1 ratios (0.01%-10%) and qPCR was performed using either MAScIR multiplex test or the qPCR simplex reference assay used in routine clinical testing by the European Treatment and Outcomes Study centre (EUTOS). The comparative clinical results revealed high qualitative and quantitative concordance rate (correlation coefficient >0.95) between MAScIR and the reference assays.

The present study illustrates the utility of MAScIR assay as a sensitive, rapid and cost effective quantitative device to monitor the BCR-ABL1 ratios by RT-qPCR on whole blood of diagnosed Philadelphia chromosome positive (Ph+) leukemia patients with e13a2 or e14a2 fusion transcripts. The test could be used as an aid in the assessment of molecular response to available treatments.

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Biography

Amel completed her BSc in Biotechnology in 2012 from College of Science at Sultan Qaboos University (SQU). Since September 2013, she joined Genetic and Developmental Medicine Clinic in SQUH as a Genetic Counsellor in training.

Abstract

The Psychosocial Impacts of Genetic Confirmation among Breast Cancer Patients in Oman

Amel Al Foori, Zandre Bruwer, Douja Meftah, Abeer AlSaegh
Sultan Qaboos University Hospital, Muscat, Sultanate of Oman

In Oman, 60% of the diagnosed women with breast cancer are under the age 50. This study investigated the psychosocial impacts of genetic confirmation among breast cancer patients in Oman. It's included all patients who were referred to the cancer genetics service in Sultan Qaboos University Hospital (SQUH) from August 2012 to June 2015.During the period of this study, 55 breast cancer patients were seen in the genetics clinic. Forty-three patients underwent diagnostic testing and 10 underwent predictive testing. Two patients decided not to undergo genetic testing. This data was collected and analyzed from the electronic files at SQUH. The identified social concerns included: social stigma, disruption of the marriage, decreased self-esteem, denial of a genetic cause of the disease. Occurrence of inherited cancer was attributed to evil spirits or envy. Many believed that there is no benefit for testing and that they should accept the disease on religious basis. The above facts were found to prevent some patients from completing genetic workup and realizing the importance of the testing for the rest of the family. In Oman, tribe is the major identity among Omani people and as a result of that, stigma and social stereotyping prevent many breast cancer patients from requesting the genetic testing. Although this is a small study size and findings cannot be used to generalize to the Omani population, it does provide insight in to the general thoughts toward genetic testing of breast cancer. Awareness of these psychosocial concerns will be extremely valuable in developing the service according the patient's needs.

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Biography

Amer A. Taqa: Professor at Dental Basic Science, Mosul University, Iraq. Have PhD degree in Dental chemistry. He has published 96 researches papers in national and international academic journals and authored 22 books. His research interests include dental chemistry, medical chemistry, and inorganic chemistry. He is editorial member in more than 110 international journals.

Abstract

The Effect of newly Prepared Cleansing Agent on Some Properties of Highly Impact Acrylic Denture Base Material

Prof. Dr. Amer A. Taqa, Assist. Prof. Ammar K. AL-Noori, Hasan K.M. Almashhadany
Prosthodontics department, College of Dentistry, University of Mosul, IRAQ

Since the early 1940s, polymethyl methacrylate has become the most commonly used denture base material. Three properties that have contributed most to the success of this material as a denture base are excellent appearance, ease in processing, and ease in repair. An inherent disadvantage is the liability of an acrylic resin denture to break during service.

The aims of this study were to evaluate the effect of newly prepared and commercial denture cleaner on some properties (color stability, dimensional accuracy, indentation hardness, surface roughness, tensile strength, residual monomer, and water sorption) of highly impact acrylic denture base material by using artificial saliva cycle. Also, to evaluate the effect of immersion cycle (2 days, 7 days, and 30 days) on these prosperities.

Total specimens of this study were 692 specimens, whereas specimens of pilot study were 9 specimens. While specimens of main study were 680 specimens, it is divided into 8 groups according to type of solutions. The specimens were prepared from highly impact acrylic resin.

The results of the present study were analyzed statistically by (Mean ± standard deviation, paired t-test , ANOVA and Duncan's multiple range test). And there was a significant difference at $P \leq 0.05$ in dimensional accuracy, indentation hardness, surface roughness, and water sorption properties among different times of immersion cycle (2 days,7 days, and 1 month), while there was no significant difference in tensile strength, properties after 1months of immersion cycle.

The conclusions of this study showed that, among denture cleanser solutions, the (soda+H2O2) has the lowest effect on the color test, residual monomer test, dimensional accuracy test, indentation hardness test, surface roughness, tensile strength, water sorption test of highly impact acrylic denture base material in (2day, 7 day, and 1month)

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December 07-08, 2016 Madrid, Spain

Biography

He completed his PhD and presently working in Sarem Cell Rsearch Center &Hospital.

Abstract

34 Maroteaux-Lamy (Mucopolysaccharidosis type 6) Patients Diagnosed in Iran

F. Hadipour (1), A. Rolfs (2), y.shafeghati (1), F.W. Verheijen (3), Z. Hadipour(1)*
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1-Medical Genetics Department of Sarem Cell Research Center and Sarem Fertility and Infertility Research Center & Hospital, Tehran, Iran
2- Albrecht-Kossel-Institute for Neuroregeneration, Centre for Mental Health, University of Rostock, Germany

Background: Mucopolysaccharidosis type 6 is a lysosomal storage disease leading to accumulation of glycosaminoglycans and a variety of symptoms including distinctive skeletal dysplasia includes short stature, dysostosis multiplex and degenerative joint disease, Coarse facial features, cardio-respiratory involvement (cardiac valve disease and reduced pulmonary function), macrocephaly; umbilical and inguinal hernia; hepatosplenomegaly, sinusitis, otitis media, hearing loss, sleep apnea, corneal clouding, and carpal tunnel disease. Although intellectual deficit is generally absent in MPS 6, central nervous system findings may include cervical cord compression caused by cervical spinal instability, meningeal thickening and bony stenosis, communicating hydrocephalus, optic nerve atrophy and blindness. MPS6 results from autosomal recessive manner and is caused by mutations in the ARSB gene, located in chromosome 5 (5q13-5q14). Over 130 ARSB mutations have been reported, causing absent or reduced arylsulfatase B (ASB or N-acetylgalactosamine 4-sulfatase) activity and interrupted dermatan sulfate and chondroitin sulfate degradation. Prevalence is 1 in 250,000 to 600,000 newborns.
Our Data including genotypes, clinical, biochemical and phenotypes, is being collected on of 34 MPS type 6 patients from IRAN. All the patients' diagnosis has been confirmed by enzyme assay and 13 patients have molecular analysis, with 3 novel mutation.
Results: Our findings to date reinforce the validity of the characteristic symptoms of Maroteaux-Lamy disease. However, they also reveal that there are patients who present with only one or two of these symptoms, and that the spectrum of disease includes remarkably attenuated forms with relatively little associated disability.
Discussion: These insights provide an indication for diligent screening of certain pediatric and adult patients for Lysosmal storage disorders such as Maroteaux-Lamy disease. Enzyme replacement therapy (ERT) with galsulfase (Naglazyme®), clinical management ,supportive care and hematopoietic stem cell transplantation are suggestive manegments for Maroteaux-Lamy disease.

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Genetic Counseling and Genomic Medicine

December 07-08, 2016 Madrid, Spain

Biography

She completed her PhD and presently working in Sarem Cell Rsearch Center &Hospital

Abstract

Mucopolysaccharidosis type 2: Information on 19 Hunter syndrome diagnosed patients in Iran.

F. Hadipour (1), A. Rolfs(2), y.shafeghati (1), F.W. Verheijen (3), Z. Hadipour(1)*
Corresponding auther's :dr.hadipour@yahoo.com
1-Medical Genetics Department of Sarem Cell Research Center and Sarem Fertility and Infertility Research Center & Hospital, Tehran, Iran
2- Albrecht-Kossel-Institute for Neuroregeneration, Centre for Mental Health, University of Rostock, Germany

Background: Mucopolysaccharidosis type 2 is a lysosomal storage disease leading to accumulation of glycosaminoglycans and a variety of symptoms including distinctive coarse facial features, short stature, cardio-respiratory involvement and skeletal abnormalities; macrocephaly; respiratory tract infections; umbilical and inguinal hernia; intractable diarrhea; hepatosplenomegaly; and skin lesions resembling an orange peel; may become evident between 2-4 years of age. MPS2 results from iduronate-2-sulfatase (I2S) deficiency, which leads lysosomal accumulation of dermatan sulfate (DS) and heparan sulfate (HS). The causative gene, IDS, is located on Xq28, approximately 320 mutations have been reported. Prevalence is 1 in 100,000 to 1 in 170,000 males.
Progression varies from a severe form with early psychomotor regression to an attenuated form.
Our Data including genotypes, clinical, biochemical and phenotypes, is being collected on of 19 Hunter patients from IRAN. All the patients' diagnosis has been confirm by enzyme assay and 4 patients have molecular analysis, with 2 novel mutation.
Results: Our findings to date reinforce the validity of the characteristic symptoms of Hunter syndrome. However, they also reveal that there are patients who present with only one or two of these symptoms, and that the spectrum of disease includes remarkably attenuated forms with relatively little associated disability.
Discussion: These insights provide an indication for diligent screening of certain pediatric and adult patients for Lysosmal storage disorders such as Hunter syndrome. Enzyme replacement therapy (ERT) which has been shown to alleviate somatic symptoms is not available in Iran yet.
Key word: Hunter syndrome, Mps type2, patients from IRAN, molecular analysis.

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Biography

Dr. Georgeta Fried is a graduate of the School of Medicine in Timisoara, Romania and the Clinical Oncology and Radiotherapy Residency Program at Rambam Medical Center. Her main research and clinical interests are in the fields of breast cancer and malignant melanoma. She is author and co-author of 20 scientific articles.

Abstract

Treatment Decisions in Estrogen Receptor-Positive Early Breast Cancer Patients with Intermediate Oncotype DX Recurrence Score Results

Georgeta Fried and Mor Moskovitz
Rambam Health Care Campus, 6 Ha'Aliya Street, Haifa 31096, Israel

This retrospective study evaluated the impact of intermediate Recurrence Score® results on adjuvant treatment decisions in estrogen receptor-positive (ER+) early invasive breast cancer, comparing treatment recommendations pre-testing with actual treatments received post-testing. Of the 111 patients included in the analysis, 78 (70.3%) had hormonal therapy (HT) and 33 (29.7%) had chemohormonal therapy (CHT) recommendations pre-testing. The Recurrence Score was significantly higher in those with a pre-testing CHT recommendation compared with those with a pre-testing HT recommendation (median of 24 vs. 22; P = 0.047; Mann–Whitney–Wilcoxon [MWW] test). Post-testing, treatment of 24 patients (21.6%) was different from their pre-testing recommendation. The difference between CHT recommendation rate pre-testing and the rate of CHT received post-testing was nonsignificant for the entire cohort and for patients' subgroups (by age, tumor size, and grade) (P ≥0.18; McNemar's test). Following classification of the cohort into two Recurrence Score subcategories (low-intermediate, [18-25]; high-intermediate, [26-30]), changes in treatment decisions (pre-testing recommendations vs. actual treatments received post testing) were reported for 16.5% of low-intermediate and 34.4% of high-intermediate patients. Post-testing, the rate of CHT decreased (by 58%) in the low-intermediate subcategory and increased (by 64%) in the high-intermediate subcategory (P <0.01, both subcategories). In logistic regression analyses, the Recurrence Score subcategory was the only significant predictor of changes in treatment decisions (pre-testing recommendations vs. actual treatments received post testing; P <0.01). The only significant difference between the two subsets of patients with such a change (HT to CHT, 11 patients; CHT to HT, 13 patients) was the Recurrence Score (median of 28 vs. 20, respectively; P = 0.0014; MWW test). These findings demonstrate that intermediate Recurrence Score results provide clinically relevant information and impact treatment decisions in ER + early breast cancer.

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December 07-08, 2016 Madrid, Spain

Biography

Negin Parsamanesh completed her PhD in Birjand Medical Universuty.

Abstract

Molecular Study of intron 2 of calreticulin gene (CALR) in type 2 diabetic patients

Negin Parsamanesh, Hosein Javdani, Ali Farahi, Maryam Valavi
Birjand Medical Universuty, Moalem street , Birjand, South khorasan, Iran

Type 2 diabetes mellitus (T2DM) is a complex polygenic disease. Genetic factors play major role in the pathogenesis of T2DM.
Calreticulin is a 46 KD Ca2+ binding protein and ER chaperon. Calreticulin (CALR) was found in high concentration in pancreas .
Genomic analysis and detection of variants related to type 2 diabetes can help to determination T2DM pathopHysiology and its familial pattern of inheritance . Imbalance in Ca2+ concentration and dysfunction of the chaperone system are speculated to be linked with type 2 diabetes mellitus (T2DM). Two-dimensional protein profiling of pancreatic beta cells in T2DM subjects has shown that the Ca2+ binding chaperone, calreticulin (CALR), plays a role in the pathopHysiology of this disease. In a case/control study design, we performed mutation screening of the promoter region, 9 exons, and exon/intron boundaries of CALR by PCR-SSCP and sequencing in 120 patients afflicted with T2DM and 530 controls. Two novel mutations were detected in T2DM patients, which were absent in the control gene pool (Mid P exact <0.01). The first mutation was a G>T transversion in intron 2 conserved polypurine tract at IVSII-142. The second mutation was a 9-bp deletion in the highly conserved exon 9 encompassing amino acids 402-404. Exon 9 encodes the low affinity, high capacity Ca2+ binding domain of CALR. This case is the first instance of a microdeletion in a gene coding sequence reported in T2DM. To our knowledge, the current study reports, for the first time, CALR gene mutations that co-occur with T2DM

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Biography

I am a Young Researchers in Molecular Genetics and Elite Club,Tabriz Branch,Medical Siences University,Tabriz,Iran.

Abstract

Twenty-two new mutations in mitochondrial tRNA genes in patients with Alzheimer's Tabriz, Iran

Shahin Asadi
Young Researchers and Elite Club,Tabriz Branch,Medical Siences University,Tabriz,Iran

Alzheimer's disease is the main form of memory, and memory loss in the elderly is the interplay of genes and environment play a role in its formation. The role of mitochondrial mutations in various neurological diseases, has effectively proven that some of these mutations of Alzheimer's disease in a non-Mendelian maternal mode of inheritance that are inherited.

All mitochondrial tRNA genes in 24 patients and 50 healthy controls using nucleotide sequences, was tested. Mitochondrial tRNA genes were found in fifteen change. The polymorphisms were eleven of them. Four changes T1633A, C1631A (in tRNA parents), T14723T, Q14704C, were classified as pathogenic mutations, such as heteroplasmy observed in patients, mutations of nucleotide sequences in different organisms has been identified. Polymorphism A12308G, eight patients were found in tRNA leucine. This change in various neurological diseases, as well as control samples has been reported.

We believe that these changes may influence the pathogenesis of Alzheimer's disease or the disease process act as a secondary injury. The percentage of heteroplasmy may be involved in the development of symptoms or onset of the disease.

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December 07-08, 2016 Madrid, Spain

Biography

I am a Student Masters of Public Health degree at the age of 32 years from Northern University Bangladesh. I Have published more than 10 papers in reputed journals.

Abstract

NUTRITIONAL STATUS OF WOMEN OF REPRODUCTIVE AGE IN A SELECTED CHAR OF RANGPUR DISTRICT

Md Zahid Hasan Khan,
MPH Nothern University Bangladesh

An observational cross-sectional study was carried out at Rangpur district in Bangladesh to assess nutritional status of reproductive aged women residing in char area with a sample size 200. Face to face interview was carried out with the semi-structured questionnaire. Convenient sampling technique was used to collect data on the basis of inclusion and exclusion criteria and written consent was taken prior to interview. Nutritional status was determined according to BMI cut off value for Asian population. Descriptive as well as inferential statistics were used to present data. Mean±SD age of respondents was 34.27±8.60. More than half (67%) of the respondents were illiterate and housewife (84%). Mean±SD income of respondents was 5700.71±282.89 per month. Underweight, normal and overweight were 67%, 30% and 3% respectively. Most respondents took rice 2-3times/day. Vegetables and soyabean were taken randomly. Lentil was taken daily. Arthritis, headache, skin disease was more common. Statistical significant association was found between nutritional status and age group ($p<0.05$), education ($p<0.05$), occupation ($p<0.05$) and monthly income ($p\leq0.05$). Half of the respondents suffered from underweight and most of them income was very low. Income generating capacity should be increased as well effective nutrition education programme must be instituted.

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Biography

I am a Student Masters of Public Health degree at the age of 32 years from Northern University Bangladesh. I Have published more than 10 papers in reputed journals.

Abstract

A preliminary pharmacological study on hypoglycemic and anlagesic effects of Momordica charantia L. (fruits, boiled and non-boiled) methanol extract in Swiss Albino mice

Md Zahid Hasan Khan ,
Master of Biotechnology & Genetics Engineering, University Of Development Alternatives, Dhaka , Bangladesh

Momordica charantia L. one of the abundant species throughout Bangladesh, was tested to evaluate its effect on blood glucose level and on pain relief on Swiss Albino mice model. The methanol extract of fruit of Momordica charantia L. was examined in reducing glucose concentration level of blood and also examined for peripheral analgesia by acetic acid induced writhing method.In the first experiment, the methanol extract of fruit of Momordica charantia L. was investigated by oral glucose tolerance test (OGTT) on reducing the glucose concentrations level of blood. 40 overnight starved mice (male:female = 2:3) were administered glucose by gavaging (Group Control), 10 mg/kg body weight of a standard drug Glibenclamide (Group Standard), and 100, 200 and 400 mg/kg body weight of methanol extract of Momordica charantia L. (Groups: 1, 2, 3 for non-boiled fruits and Group: 4, 5, 6 for boiled fruits respectively), followed by administration of glucose (2 gm/kg body weight) after 60 minutes. Blood glucose levels were analyzed at 120 minutes after glucose administration by glucometric method. In the second experiment, a total of 45 adult mice (male:female = 2:3) were divided into 9 groups and 5 mice in each group. The control group (1) was treated with only 1% acetic acid by intra- peritoneal administration, Standard group (I) and Standard group (II) were treated with Aspirin 200 mg/kg body weight & 400 mg/kg body weight respectively by gavaging and 1% acetic acid by intra-peritoneal administration. Groups: 7, 8, 9 for non-boiled fruits and Group: 10, 11, 12 for boiled fruits were treated with MeOH extract of Momordica charantia L. at 100 mg/kg, 200 mg/kg and 400 mg/kg body weight respectively by gavaging, followed by 1% acetic acid administered by intra-peritoneal injection after 60 minutes. Acetic acid induced mice were subjected to “writhing” for 15 minutes of observation. In the first experiment, the results are expressed as Mean value. From the glucometric analysis of blood glucose levels after 120 minutes glucose gavaging, we found that the Control mean value was 5.96 mmol/l and the Glibenclamide treated sample mean value was 2.92 mmol/l.

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Biography

Yaser Abdulaziz Hadi has completed his PhD from University of Bradford. He is the Managing Director of Yanbu Industrial College, a higher education technical institute under the Royal Commission for Jubail and Yanbu. He has published more than 7 papers in reputed journals and 13 papers as conference proceedings contributor. He is a Professional Engineer with 9 qualification titles from awarding organizations. He has 4 Memberships in professional organizations like IE, SME, SEC, and SCE.

Abstract

A Study on the Strain and Function of One-Humped Dromedary Foot Pad

Dr. Yaser A. Hadi
Mechanical Engineering Technology Department, Yanbu Industrial College,
Saudi Arabia,

The purpose of this study is to describe and identify the evident analysis of one humped dromedary foot. The analysis impacts in fine sand of the camel sole in slipper regions, which would be used in diagnosis of foot and footpad disorders. Behaviour of sole pad penetration into sand was predicted on camel's fore and rear feet using computed technique, for the corresponding sections at the same weights and speeds and for their selected identity. For analysis, a 3D model was used. The results revealed that, their planter surfaces were separated from the ground by foot pad and the interdigital notch of the sole pad were appeared with various scales and colors.

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December 07-08, 2016 Madrid, Spain

Biography

I am managing director of Lewis Fertility Testing Ltd; a spin out company from Queen's University. Lewis Fertility Testing Ltd provides a diagnostic service for male fertility health.

Abstract

The paternal genome and the health of the ART child

PROFESSOR SHEENA LEWIS
Centre for Public Health
School of Medicine, Dentistry and Biomedical Sciences

The impact of the male genome on offspring health is a much neglected topic. Even in this, the twenty-first century, we are inclined to consider 'mother and baby' health as an indivisible unit with the father reduced to a sperm; from an ejaculate where all sperm have equivalent quality; with a function tantamount to parthenogenesis. Sperm DNA quality is a robust biomarker in assessing male reproductive potential. It has also been shown to be a more valuable diagnostic and prognostic biomarker for male infertility and assisted reproductive treatment (ART) outcome than any of the conventional semen analysis parameters. It is linked to every fertility check point from reduced fertilization rates, lower embryo quality, reduced pregnancy rates through to higher rates of spontaneous miscarriage and an increased incidence of childhood diseases.

One of the major culprits of sperm DNA damage is oxidative stress. In this lecture, the vulnerability of the paternal genome to sperm DNA damage and increased mutational load from such assault will be reviewed using models such as paternal age and modifable lifestyle hazards like smoking. The subsequent impact on genetic damage on child health will also be debated. Using ART data from the past 30 years, the human evidence for and against the impact of the male genome on child health will be explored. Finally, the health of offspring from surgically retrieved (seminal plasma bypass) sperm will be addressed using the latest animal data.

About Madrid, Spain

Madrid is one most important tourist destinations in the Spanish east coast. Theere are many golf courses, along with the tranquil waters of the Mediterranean Sea, are part of the appeal of this beautiful harbour city, which sits at the foot of the Castle of Santa Barbara, a silent witness to the numerous civilisations to have settled down. The historic quarter at the foot of this fortress, conceals an interesting religious and civil architectural legacy, including (Spain boulevard) the emblematic Explanada de Espana, a traditional recreational area to the local residents. Madrid is also a land of deep-rooted traditions, such as the Moors and Christians festivities and the Night of San Juan. When it comes to Madrid's delicious cuisine, rice takes the central stage, cooked in a million different ways.

Madrid has a Mediterranean climate that features hot summers and mild winters. Madrid is protected by Northern hills and mountains which results in a constant micro climate which also limits the rainfall. It usually has not more than 20 days of rainfall in a year. Famous for its excellent weather, the city invites you to take a trip along the coast or to the wonderful island of Tabarca. Along the Madrid harbor you find beautiful long alleys for nice relaxing walks, enjoying the palm trees and the mild climate. Additional to sightseeing, direct from the harbor area, a lenghty wide sandy beach leads its way up to San Juan. Just drop your towel on the sand and enjoy a wonderful day in the sun. During summer, Madrid with its Airport is a starting point for many Costa Blanca tourists, while during the winter tourists and residents tend to live along the coast in places like Benidorm, Calpe and Denia.

The airport in Madrid is currently the sixth largest airport in Spain. Growing in size continuously over the past years, in March 2011 the airport got a new terminal building replacing the old two terminals.



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Gran Vía



Madrid Cathedral



Plaza de Cibeles



Plaza de la Villa



Plaza de Oriente



Plaza Mayor



Puerta de Alcalá



Puerta_del_Sol