



20th Global Obesity Meeting

August 24-25, 2018 Singapore

Posters

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Sex-specific effects of the high fat and sugar diet on FGF21 signaling in brown adipose tissue in C57BL mice

Tatiana Iakovleva, Balybina N Ju, Makarova E N and Bazhan N M
Institute of Cytology and Genetics, Russia

The energy-burning capacity of Brown Adipose Tissue (BAT) makes it an attractive target for use in anti-obesity therapies. There are sex differences in the metabolic disorders development: High fat diet induces hyperglycemia development in males, but not in females. Serum FGF21 levels are associated with BAT activity. We investigated the effects of high fat and sugar diet (10 weeks) on blood levels of FGF21, insulin, leptine, glucose, on mRNA levels of genes involved in FGF21 signaling (FGF21, Klotho beta, PPAR γ) and on mRNA levels of genes related to BAT activity (UCP1, SLC2A1, CPT1, DIO2 and HSL) in females and males of C57BL mice. We found that diet induced obesity, increased blood levels of FGF21, glucose and leptin in females and males and induced hyper-insulinemia development in males. We found also that diet impaired BAT FGF21 signaling only in males: Increased mRNA level of FGF21 and reduced mRNA levels of Klotho beta and PPAR γ . Obviously due to impaired FGF21 signaling high blood FGF21 levels and increased BAT FGF21 expression were associated with decreased expression of SLC2A1 and unaltered expression of UCP1 genes in BAT of obese males. In females, the diet did not affect FGF21 signaling. This study was supported by the Russian Science Foundation, Grant No 17-15-01036.

Biography

Tatiana Iakovleva has graduated from Novosibirsk University in 1988. She is a leading researcher at the Institute of Cytology and Genetics, Russia

tatyanajakovleva@yandex.ru

Notes:

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Leptin administration in mid-pregnancy reduces fetal and early postnatal growth rate and abolishes obesity-associated hyperglycemia in mouse offspring

Elena Makarova, Denisova E and Kozhevnikova V
Institute of Cytology and Genetics, Russia

Maternal obesity increases the risk of obesity in offspring. Leptin is increased in obese animals, and elevation of maternal leptin may affect the metabolic phenotype of the offspring. We explore the effects of leptin elevation during mid-pregnancy on the offspring metabolic phenotypes, fetal growth, and placental gene expression. C57BL mice received a single injection of leptin or saline on pregnancy day 12. Body Weight (BW) was measured weekly in offspring, which consumed standard show or palatable food and the mRNA expression of glucose and amino acid transporters, insulin-like growth factor 2 and its receptor was measured 3 hours and the placental and fetal weights were measured 24 hours after the injection. The offspring born to leptin-treated mothers exhibited growth retardation before and catch-up growth after weaning and mature male offspring had an increased BW on a standard diet. Prenatal exposure to leptin did not influence the obesity development but prevented the development of obesity-associated hyperglycemia. The leptin injection decreased the fetal weight by 5% and the placental mRNA level of amino acid transporter SNAT2. The results suggest that elevation of maternal leptin in mid-pregnancy has positive effect on glucose metabolism in mature offspring and this effect is associated with leptin influence on fetal growth and amino acid transporter expression in placentas. Supported by the RFBR, Grant 17-04-01357.

Biography

Elena Makarova is currently a Senior Researcher in the Laboratory of Physiological Genetics in the Institute of Cytology and Genetics, Novosibirsk, Russia. Her researches focus on the studies of sex-specific influence of maternal leptin on metabolic characteristics in progeny of rodents. She with her colleagues found maternal leptin retarded obesity development in male progeny and improves glucose metabolism in progeny of both sexes in mice.

enmakarova@gmail.com

Notes:

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Perioperative lifestyle and nutrition interventions in patients undergoing bariatric surgery: Systematic review, preliminary results

Mateusz J Swierz, Dawid Storman, Monika Storman, Katarzyna Jasinska, Anna Skuza, Malgorzata Gorecka, Paulina Tobola, Wojciech Staskiewicz and Malgorzata M Bala

Jagiellonian University Medical College, Poland

Background: The most effective treatment for patients with morbid obesity is Bariatric Surgery (BS). To enhance the sustainability of results, certain pre and postoperative interventions could be implemented.

Objectives: This systematic review focuses on behavioral lifestyle and nutrition interventions, applied perioperatively, to enhance the sustainability of the results of BS.

Methods: Electronic databases (Ovid MEDLINE, Embase, CENTRAL and Web of Science) were searched using adequate strategies with no language and date restrictions. Studies designed as randomized controlled trials, where any type of lifestyle (individual/group sessions aiming to change diet or physical activity through behavioral strategies) or nutrition intervention was provided during perioperative period to patients undergoing BS were included. The primary outcomes are weight loss measured as change in kg/BMI/percentage weight loss from baseline weight/percentage of excess weight loss, change in fat free mass, fat mass. Secondary outcomes are: Change in comorbidities, quality of life, anthropometric parameters and adverse effects. Title/abstract and full text screening were performed by two reviewers independently and any conflicts were resolved by discussion/help from the third reviewer. Every stage was preceded by calibration. We are in the process of data extraction and quality assessment using the Cochrane Risk of Bias Tool. The certainty of evidence will be assessed using GRADE methods.

Results: Databases searches yielded 6798 results which after de-duplication provided 5030 references to screen. The screening resulted in 32 references (25 studies) included for extraction and 37 references have been labeled as awaiting classification. These include conference abstracts of unpublished studies (n=32), study protocols (n=2) and papers with unclear follow-up waiting for response from authors (n=3). Within the included studies, the total number of patients randomized in the trials was 2681. Mean age was 42.7±10.09 SD. Female constituted 77.3% of total sample. In the preliminary mapping of the study results for the purpose of quantitative analysis we faced the problems related to the vast diversity of reporting of study results (weight loss) presents the mapping of the ways weight loss results were presented in the studies. Other problems we faced included incomplete reporting of data; some studies presented specific data incompletely or only on charts, which requires additional contacts with the authors to obtain the data.

Conclusion: Incomplete reporting of study results and vast diversity of the ways the results of the studies are presented will make synthesis of all the results related to weight loss very difficult. In order to make future comparisons in the field of bariatric more extensive, developing core outcome set will be very useful tool. We have started the process of data extraction and quality assessment.

Biography

Mateusz J Swierz is a student of Jagiellonian University Medical College, Poland. His main interests focus on this area of medicine. Being a Member of Cochrane Poland, he actively propagates the idea of evidence-based medicine and incorporates it into science projects, currently resolving around bariatric surgery and the use of probiotics in surgery.

mjswierz@gmail.com

Notes:

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Evaluation of the quality of systematic reviews and meta-analyses in bariatrics: The AMSTAR 2 checklist

Monika Storman, Dawid Storman, Mateusz J Swierz, Katarzyna Jasinska and Malgorzata M Bala
Jagiellonian University Medical, Poland

Background: AMSTAR 2 is a critical appraisal tool for the methodological quality of systematic reviews (that include randomized or non-randomized studies or both) of healthcare interventions. It has 16 items, among them 5 are identified as critical domains (which can affect the validity of a review and its conclusions).

Objectives: To assess the quality of studies published as SR or MA in the field of bariatrics (BS) in 2016-2017.

Methods: Following a protocol published in PROSPERO (CRD42017080394) we identified SR and MA in BS by searching of 3 databases using pre-specified search strategy. Two authors independently: Reviewed all titles and abstracts, assessed full texts of potentially eligible studies and are extracting the data and assessing the quality of included studies using AMSTAR 2 checklist. Any discrepancies are resolved with discussion and help from the third reviewer.

Results: Until July 2018 three papers using the AMSTAR 2 tool for the assessment of the reviews were published in PubMed database, but none of them in BS. Two studies assessing the quality of reviews in BS using AMSTAR tool. One of them included 32 SRs, which were all assessed as moderate quality. Second study assessed the quality of nine SRs of RCTs published from 1999 to 2012 as moderate or high quality. Such a small sample of studies assessed does not reflect the overall quality of SR and MA published in bariatrics. Our study included 74 recently published SRs and MAs.

Conclusions: The quality of studies published as SR and MA in 2016-2017 in BS is highly unsatisfactory.

Biography

Monika Storman, a PhD candidate at Department of Internal Medicine and Diabetology, Medical University of Warsaw, graduated from Jagiellonian University Medical College, Krakow, Poland. The presented abstract was created as part of the project: "Systematic Insight into Obesity" in Jagiellonian University Medical College in Krakow, financed as Grant from European.

monika.storman@wp.pl

Notes:

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Cocoa supplementation has beneficial effects on plasma HDLc and triglyceride in central obesity male with atherogenic dyslipidemia but no significant changes on oxidized LDL

Syaiyed Jamaluddin and Nurpudji A Taslim
Hasanuddin University, Indonesia

Background: Central obesity related to atherogenic dyslipidemia which was characterized by high serum triglycerides, increased sLDL and decreased HDLc. Cocoa powder rich in polyphenols as antioxidant sources reduced atherosclerosis risk.

Objective: To investigate the influence of cocoa supplementation to atherogenic dyslipidemia in central obesity male subjects by assessing lipid profiles and oxidized LDL.

Design: 34 healthy male (aged >25-55 years, waist \geq 90 cm) were recruited to participate in an 8 week randomized and double blind study: 17 subjects received 4 gram cocoa in capsules and the other 17 subjects received placebo. Both groups had 15% energy restriction and fat <25% of total energy, no changes in activities.

Results: After 8 weeks, no changes in total cholesterol and triglycerides in both groups ($p>0.05$). LDLc level decreased significantly in both groups (cocoa $p=0.003$ vs. placebo $p=0.004$). HDLc level increased significantly only in cocoa group ($p<0.05$), oxidized LDL level showed no changes in both groups ($p>0.05$). If we compared atherogenic cocoa group with atherogenic placebo group ($n=17$), we found no changes in total cholesterol in both groups ($p>0.05$), but higher reduction in triglyceride showed in atherogenic cocoa group $p=0.043$. HDLc level increased significantly only in atherogenic cocoa group ($p=0.011$), no changes in atherogenic placebo group ($p=0.575$). Oxidized LDL level showed no changes in both atherogenic groups ($p>0.05$).

Conclusion: Cocoa supplementation on central obesity male within a hypo-caloric and low fat diet increased HDLc in dyslipidemia and atherogenic dyslipidemia, higher reduction in triglyceride in atherogenic dyslipidemia then placebo. No significant changes showed in oxidized LDL level in both dyslipidemia and atherogenic dyslipidemia.

Biography

Syaiyed Jamaluddin is a Clinical Nutrition Specialist Program Participant at Faculty of Medicine, Hasanuddin University, Makassar, Indonesia since 2012. He has worked at some health centers in Maros Regency near Makassar from 2002 till 2012 and involved in some health programs: Leprosy, tuberculosis, malaria, HIV-AIDS and nutrition.

syaiyedjamaluddin@gmail.com

Notes:

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Nutritional therapy approach for post ileostomy ET cause multiple diverticulitis ileum

Febryan Agus Pramuyo and Agussalim
Hasanuddin University, Indonesia

Background: Obesity could cause multiple diverticulitis induce dietary high fat and low fiber in daily diet. This case especially Ileum diverticulitis, is a gastrointestinal disease characterized by inflammation of abnormal pouches - diverticuli - which can develop in the wall of the small intestine, symptoms typically include upper abdominal pain of a sudden onset. The onset of symptoms however, may also occur over a few days. Other symptoms could be nausea, constipation and diarrhea, gastrointestinal intolerance, electrolyte imbalance and vitamin B12 mal-absorption. The main principle in management of wound healing in ileum diverticulitis is recurrent prevention by changing diet, where clinicians need to identify this condition in the patient and improve postoperative outcome and accelerate wound healing and administration of appropriate diets.

Methods: A 39 years old female with obesity history was consulted to clinical nutrition department with moderate malnourished patient. SGA SCORE B due to inanition in 5 month previously, body weight had decreased for around 10%; 24 hours food recall was about 868.5 kcal. The patient metabolic status was: Anemia, immune system depletion, hypo-albuminemia, hyper-bilirubinemia, hypokalemia and normal gastrointestinal function. Nutritional therapy based on Harris-Benedict equation was 1900 kcal, (protein 22%, carbohydrate 55% and fat 23%) and admitted *via* oral and parenteral nutrition containing Branched-Chain Amino Acid (BCAA), glutamine, micronutrient and vitamin to accelerate wound healing process.

Result: After 60 days, there were improvements in nutritional status based anthropometric, laboratory value and faster process of postoperative wound healing.

Conclusion: Optimal nutrition supported postoperative multiple diverticulitis improvement by giving low fat and high fiber, high protein contain BCAA and glutamine, micronutrients and vitamins.

Biography

Febryan Agus Pramuyo has his expertise in evaluation and passion in improving the health and wellbeing. His open and contextual evaluation model based on responsive constructivists creates new pathways for improving healthcare. He is evaluating patient in low-fiber diet with gastrointestinal inflammation in obese people can create a disease called diverticulosis. He is a Clinical Nutrition Resident at Hasanuddin University in Makassar, South Sulawesi, Indonesia. He is very concerned about most people with obesity who consume a lot of meat but lacks fiber foods and its impact will may cause diverticulosis.

febryanpramuyo25@gmail.com

Notes:

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Nutritional therapy in patient with congestive heart failure

Maria Angela and Agussalim Bukhari
Hasanuddin University, Indonesia

Background: Congestive heart failure is a chronic and progressive disease, with one of the symptom is a fluid retention as a result of reduced heart's ability to pump blood.

Case Report: A 40 year-old moderate malnourished male patient was diagnosed with congestive heart failure and dilated cardiomyopathy for 14 months. There is history of several times hospitalization in the past 6 months. Patient was readmitted 2 weeks ago with major complaints shortness of breath. Oral intake was reduced. Patient's BMI before diagnosed with heart problem was 33.9 kg/m², and the BMI in primary survey was 24.6 kg/m². Vital sign within normal range, only ascites was found in physical examination accompanied by limited functional capacity. There were abnormal values for WBC, TLC, uric acid and sodium serum. Nutritional assessment was based on subjective global assessment. Nutritional therapy was given gradually with target energy 1750 kcal and protein 1.1 g/kg IBW/day. Fluid requirement was adjusted to the patient's fluid output by maintaining a negative fluid balance. Nutrition target was achieved by seventh day of nutritional therapy, in conjunction with improved physical activity and laboratory values.

Conclusion: Obesity contributes to the occurrence of cardiomyopathy. Nutritional therapy and fluid management are crucial in holistic care medicine for patients with congestive heart failure to reduce mortality.

Biography

Maria Angela is a Clinical Nutrition Specialist Program Participant in Faculty of Medicine, Hasanuddin University, Makassar, Indonesia. She has earned her Medical Doctorate at Wijaya Kusuma Surabaya University in 2011. She has worked at Premier Hospital Surabaya for 3 years as a Resident Medical Officer and was joined in Palliative Team for cancer patients. In 2015, she enrolled in Clinical Nutrition Specialist Program at Hasanuddin University.

angela.turangan@gmail.com

Notes:

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Nutrition therapy for overweight burns patient with hypoalbuminemia

Sentot Handoko and Agussalim Bukhari
Hasanuddin University, Indonesia

Background: Burns is damage and or loss of tissue due to contact with sources that have very high temperatures. Malnutrition can lengthen the treatment and wound healing. Nutritional therapy is an important step in the management of burn.

Methods: A 23-year-old woman was consulted to clinical nutrition department with complaints of being unable to eat by oral for burns on the entire face and suspected with inhalation trauma. Laboratory tests found albumin 2.8 g/dL, Upper Arm Circumference (UAC) 33 cm. Overweight nutrient status (115.8%), total energy expenditure 2300 kcal/day, with protein 20-25%, carbohydrate 55-65% and fat 20-30%. Hypoalbuminemia corrected with a protein intake of 2-2.5 g/KgBW/day; supplemented by vitamin B complex, zinc, vitamin C and vitamin A.

Results: After 13 days, patient's nutritional status had been improved the laboratory value. Wound healing becomes better.

Conclusion: Proper nutrition therapy and supplementation can maintain or improve nutritional status of the patient and accelerate the healing process of burns.

Biography

Sentot Handoko is a Resident of Clinical Nutrition Department, Medical Faculty of Hasanuddin University Makassar, Indonesia since 2015. He has completed his graduation as Medical Doctor in 2001 at Medical Faculty of YARSI Jakarta, Indonesia. He has worked at Simpangan Depok Hospital, West Java, Indonesia since 2009 until 2015 and he has been working at Indonesia's Patent of Contraception Organization since 2013.

senthand@yahoo.co.id

Notes:

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Nutrition therapy for obese ICU patients with special consideration for the reference of protein in tune with ASPEN 2016 versus ESPEN 2015

Ignatius Yuwanda Chrissander and Agussalim Bukhari
Hasanuddin University, Makassar, Indonesia

Background: Hypocaloric, high protein feeding regimens have been proposed for feeding obese critically ill patients. While both actual and ideal Body Weight (BW) have been proposed, neither is an accurate reflection of Total Body Protein (TBP) content in obese individuals. Dosing protein based on Lean Body Mass (LBM), which is highly correlated with TBP, might be the most appropriate method for calculating protein needs as defined by actual body composition. We are trying to make a meeting point to determine protein needs to use in hypocaloric feeding for obese patients based on ASPEN which use Ideal Body Weight (IBW) in tune with ESPEN which use LBM

Methods: A 39 years old obese female had been admitted to intensive care unit due to congestive heart failure. Actual BW is 160kg (body height:160cm ; BMI:62,5 kg/m²). Patient had low albumin level (3.2g/dl), low potassium, low lymphocyte count (1700/ μ L) <leukocyte 13560/ μ L>, normal gastrointestinal function. Energy calculation was based on ASPEN 2016 guideline is 1250kcal via oral, protein was based on ESPEN, in which lean protein need (LPN) is 1.8g/kg standard LBM BW <36.9kg> = 66g, and adjusted protein need is LPN x LBM ratio = 66g x 1.67 = 110g (ASPEN 2.1g/kg IBW<52.4kg> = 110g), both are equal 35% from macronutrient composition. Carbohydrate and fat composition are 45% (141g) and 20% (28g) respectively, with NPC:N = 45:1 (according to 30-50:1 ratio in ASPEN). The nutritional therapy is including 25.8 g of branched chain amino acids.

Results: Patient was carried out feeding regimens completely, marked by 100% food recall. After 7 days, there were some improvements from clinical and laboratory values, marked by weaning from bilevel positive airway pressure machine, handgrip dynamometry power increment(30kg to 36kg), and elevation of lymphocyte count in conjunction with leukocyte that decreased toward normal.

Conclusions: Optimal protein support for obese patient is an important value, either ASPEN or ESPEN method can be used interchangeably.

Biography

Chrissander is a 3rd year clinical nutrition resident in Hasanuddin University, Makassar. His interest is in nutrition field, beside of clinical nutrition, also included sports nutrition, related to muscle development, body weight reduction and also as an fitness enthusiast. Formerly work as a general practitioner in Mayapada Internal Hospital, South Jakarta, Indonesia.

chrisswarrior@gmail.com

Notes:

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Obesity and severe Crohn's disease

Wita Tando, Haerani Rasyid, Mardiana Madjid
Hasanuddin University, Indonesia

Background: About 15–40% of patients with IBD are obese, which might contribute to the development of IBD. Obesity is recognized as a state of chronic low-grade inflammation. There are two approaches that are suspected to link obesity to IBD that is the role of visceral adiposity “creeping fat” and dysbiosis. Visceral adiposity has been independently associated with increased risk of IBD-related complications and disease severity. Obesity might modify response to immunomodulator therapy in IBD.

Case report: A 31 year-old man, was referred to us in September 2017 with Severe Crohn's Disease with hematochezia. In 2013, he was diagnosed with Crohn's Disease and his BMI was 28.6 kg/m² (weight 78 kg). Before illness, patient used to consume traditional foods containing red meat, fried food and soft drinks. He rarely ate vegetables and fruits, and rarely exercise. In early 2017 patient were diagnosed with Chronic Kidney Disease on regular hemodialysis. His metabolic status was anemia, immune depletion, hypoalbuminemia, and electrolyte imbalance. On primary survey, his weight was 45 kg. Upper Gastrointestinal Endoscopy showed gastritis hemorrhagic. Lower Gastrointestinal Endoscopy revealed signs of severe Crohn's disease, stricture, entero-colic fistula, and anal fissure. Nutritional therapy was given in order to meet energy requirement, considering the nutritional route and macronutrient composition also type of formula (polymeric vs elemental). Supplementation should be given to prevent micronutrient deficiencies, decrease inflammation and improve the immune system (vitamin D and zinc). After 34 days of nutritional therapy, the frequency of hematochezia was decreased, accompanied by increase of plasma albumin and lymphocyte count.

Conclusion: Epidemiological studies, in particular prospective cohort study, implicating obesity in the development of IBD are limited, although there is an evidence from a pathophysiological perspective. This case report may encourage more prospective research about effects of obesity on incidence, course of disease, and treatment response to IBD and also the effect of obesity treatment to IBD outcomes. The aim of nutritional therapy in Crohn's disease is to reduce inflammation, improve the immune system and intestinal homeostasis, also induce and maintain of remission.

Biography

Wita Tando is Clinical Nutrition Specialist Program participant in Faculty of Medicine, Hasanuddin University, Makassar, Indonesia. She earned her Medical Doctor in 2007. She worked at Community Health Centre for 8 years, focus on prevention and treatment of non-communicable disease. In 2015, she enrolled in Clinical Nutrition Specialist Program at Hasanuddin University.

witatando@gmail.com

Notes:



20th Global Obesity Meeting

August 24-25, 2018 Singapore

e-Poster

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Effect of intra-gastric balloon installation and laparoscopic sleeve gastrectomy to comorbidity reduction and cardiometabolic disease staging in 6 month after procedure

Makhmudov U M, Khashimov Sh Kh Khaybullina Z R, Sharapov N U, Sadikov N S, Kabulov T M and Tashkenbaev F R
Republican Specialized Center of Surgery named after academician V. Vakhidov, Uzbekistan

Background: Achieving a weight loss is an important goal of bariatric surgery, given the increased risk for weight-related morbidity and mortality. The most common comorbidity at obesity is arterial hypertension, diabetes, Non-Alcoholic Fatty Liver Disease (NAFLD), depression. Article is devoted to evaluation of comorbidity in patients with obesity 3 after weight loss after Laparoscopic Sleeve Gastrectomy (LSG) and Intra-gastric Balloon Installation (IBI).

Objective: To determine effect of Laparoscopic Sleeve Gastrectomy (LSG) and Intra-gastric Balloon Installation (IBI) to weight loss and comorbidity in patients with obesity 3.

Methods: A total of 20 patients mean age 34.7 ± 2.5 years; 80% female, BMI= 49.4 ± 2.5 kg/m², 6 of them were with extremely high weight (BMI= $62.1-75.4$ kg/m²). Intra-gastric balloon (Allergan Inc., USA) was installed to patients with extremely high BMI (n=6), another patients were undergoing laparoscopic sleeve gastrectomy (n=14). Comorbidities were evaluated according to cardiometabolic disease staging.

Results: It is established, that adiposity of 3 (BMI 49.4 ± 2.5 kg/m²) associates with hyperlipidemia/hypertriglyceridemia in 85% of cases, diabetes mellitus-2/glucose intolerance- in 50%, arterial hypertension in 45%, Non-Alcoholic Fatty Liver Disease (NAFLD) in 35% of cases. Laparoscopic sleeve gastrectomy and intra-gastric balloon installation allow to achieve weight loss on 21.1% and 16.2% vs. initial weight, LSG and IBI were similar effective to weight loss ($p > 0.05$) that caused decreasing of comorbidity: Glucose intolerance is reduced in 2 times, arterial hypertension in 3 times, dyslipidemia in 1.9 times; NAFLD in 1.8 times in 6 months after intervention. LSG and IBI allow improving parameters on scale cardiometabolic disease staging, having achieved zero cardiometabolic risk at 35% of patients and at other patients' transition in easier of its stage. Weight loss and reduction of comorbidity after LSG and IBI are combined with decrease of pro-inflammatory cytokines; IL-6, TNF-a and C-reactive protein in blood serum.

Conclusion: LSG and IBI were similar effective to weight loss ($p > 0.05$) that caused decreasing of comorbidity: Glucose intolerance is reduced in 2 times, arterial hypertension in 3 times, dyslipidemia in 1.9 times, NAFLD in 1.8 times in 6 months after intervention. IBI should be recommended as 1st step of obesity treatment in patients with extremely high weight, because this procedure causes decreasing of comorbidity and perioperative risk.

Biography

Makhmudov U M has completed his Doctor of Philosophy degree in 2005. In 1995 he has graduated from the Tashkent Pediatric Medical Institute. He is a Senior Researcher at the Department of Endovascular Surgery and is engaged in bariatric surgery since 2014.

bek-mahmudov@mail.ru

Notes:



20th Global Obesity Meeting

August 24-25, 2018 Singapore

Accepted Abstracts

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Nutrition information seeking behavior: A study of adult obese patients of a Pakistani hospital

Abeeda Zia and Mumtaz Ali Anwar

University of Veterinary and Animal Sciences, Pakistan

This study investigated the nutrition information seeking behavior of adult obese patients of a Pakistani hospital. This issue has not been given adequate attention in research. It is necessary to look into this very important aspect if a society wants to become a healthy one. Survey method using a questionnaire was used to collect data from adult obese patients. The initial instrument prepared by the researchers was expert reviewed for content validation and pilot tested. It was administered to 30 patients visiting the nutritionist of a hospital. They were selected using convenience sampling technique. 28 respondents were female and two male. The results showed that most of the respondents gave preference to taste and cost in food selection. Grains, vegetables and fruit were highly preferred by the respondents. They used a variety of sources for nutrition information. The top three frequently used nutrition information sources were: Family members, friends and internet. Most of the participants gave preference to the print format. A majority of the respondents reported lack of time during appointments to ask for nutrition advice, confusion with too much information and contradictory information as the main problems in their information seeking. The results of this study can be used to provide improved nutrition information sources and services for adult obese and remove barriers to facilitate the use of nutrition information.

abeedazia@uvas.edu.pk

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Prevalence of obesity in correlation with physical activity among the school students of Pokhara, Nepal

Archana Bhaila

KIST Medical College and Teaching Hospital, Nepal

Obesity is an emerging major public health problem throughout the world and its prevalence has largely increased over the last decade in both developed and developing countries. Only few studies addressing obesity is available in Nepal. While this global epidemic is well described in the adult population, not much data is available regarding the prevalence of overweight/obesity in children or adolescents amongst developing countries. Therefore the present study was to obtain prevalence of obesity in school children and to analyze the relationship of obesity with physical activity of the students. Anthropometric data was collected from 100 students. Physical activity of the students was assessed with the help of a set of questionnaires. The results of this study showed that the obese/overweight subjects had a greater BMI. Of the total population 3% was obese while 19% was overweight. The prevalence rates of overweight and obesity in girls were higher than in boys. Of our sample, 31% were found to be underweight. Most of the obese/overweight children belonged to the private schools, while majority of the underweight belonged in government school. The association of different types of physical activities (sports, domestic help and motor transportation) with BMI was found to be significant. Thus, we can say that obesity and under nutrition co-exist in Nepalese school-children. This study showed the higher rates of underweight children, even though Nepalese population is starting to have worrisome rates of overweight. There is a great need for information on nutritional status and physical activity in school-age children.

archubh77@gmail.com

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Relation of body mass index and waist circumference with the incidence of diabetes mellitus in elderly

Hosea Hariono

Atma Jaya Catholic University of Indonesia, Indonesia

Background: Diabetes mellitus is a chronic disease with various complications. However, many of those with the disease are unaware of their condition eventually leading to inevitable complication. Among various types of diabetes, 90% suffers type-2 diabetes mellitus. Obesity is the main contributing factor in the pathogenesis of this disease. Body Mass Index (BMI) and Waist Circumference (WC) are two measurements often used to assess obesity. Both of these measurements have the potential to be a simple examination that could help to show the incidence of diabetes mellitus.

Aim: Determining the relation of body mass index and waist circumference with the incidence of diabetes mellitus in elderly.

Methods: Research is done cross sectionally by acquiring anthropometric and blood sugar measurements in the elderly community of GKI Serpong.

Results: BMI have no meaningful relationship with the incidence of diabetes mellitus. WC has a meaningful relationship with the incidence of diabetes mellitus (p-value: 0.015, confidence interval: 95%). The cut-off point of WC is 85.25 cm with 63% sensitivity and 60% specificity.

Conclusion: BMI have no meaningful relationship with the incidence of diabetes mellitus while WC has a meaningful relationship with the incidence of diabetes mellitus.

hoseahariono@outlook.com

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Obesity status of children in Kenya and programs to enhance resilience to obesity

Judith Waudu

Kenyatta University, Kenya

Historically Kenya has been associated with the problem of under-nutrition. During past two decades Kenya has been struggling with the problem of double mal-nutrition namely under-nutrition and obesity. Nutrition in transition has escalated the problem of child obesity which stands at 24%. The main causes of obesity include consumption of fast and street foods which are high in fats and sugars, and sedentary lifestyles. The cultural perception that being “fat is good”, is also a causative factor. The consequences of obesity thus include: High morbidity and mortality, poor self-image, high prevalence of chronic diseases such as type 2 diabetes and cardiovascular diseases. Further, obesity is not currently covered by the Health Insurance Fund. In order to enhance resilience to obesity in children, one must begin early in life when children are forming their eating habits to instill good nutrition. The Ministry of Health has adopted WHO measures to reduce child obesity. These initiatives include: Promotion of dietary diversity, promotion of intake of health foods, promotion of physical activity at an early age, monitoring of preconception and pregnancy weight, nutrition and physical activity in school age children and behavior change in weight management. The Kenyan new curriculum has responded to this problem of child obesity by including nutrition and physical activity as compulsory subjects starting at pre-pre-primary (age 3). The introduction of an annual Kenyan Nutrition and Physical Activity School Children Score Card since 2014 has had a positive impact on obesity reduction. These measures if implemented successfully will go a long way in solving the problem of child obesity.

waudojudith@yahoo.com

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Association of body mass index and all-cause mortality in a tertiary regional hospital

Lei Anne Carolino

Jose B. Lingad Memorial Regional Hospital, Philippines

Background: All-cause mortality is increased when the patients have a co-existing condition of obesity and underweight. Cohort studies claimed that higher body mass index was a cohort risk associated with coronary heart disease, stroke and respiratory disease mortality, while other chronic diseases can lead to weight loss. In the Philippines, there are no existing data regarding the association of BMI and all-cause mortality.

Methods: This prospective cohort study was conducted at Jose B. Lingad Memorial Regional Hospital from September 2016 until September 2017. Analysis of BMI and mortality was done and logistic regression was performed to determine confounding variables.

Results: There was a significant association between BMI and mortality wherein among the 700 cases, 26% were underweight, 26% overweight and 21% pre-obese patients while in logistic regression, odds of mortality is higher patients who were obese class 1, followed by obese type 1 and underweight and mortality risk is increased when the patients were cigarette smokers, with upper gastrointestinal bleeding, with chronic obstructive pulmonary disease, with coronary artery disease, with pneumonia and cerebrovascular disease.

Conclusion: The patients' BMI is associated with all-cause mortality. Furthermore, the risk of mortality is increased further by intervening factors of body mass index such patients' life style and type of co-existing diseases. Mortality risk among underweight patients is increased by tobacco consumption as well as having related diseases such as upper gastrointestinal bleeding, chronic obstructive pulmonary disease and pneumonia while obesity mortality risk could occur among those with concurrent coronary artery disease and cerebrovascular disease.

lei_carolino@yahoo.com

20TH GLOBAL OBESITY MEETING

August 24-25, 2018 Singapore

Association between birth weight and some metabolic syndrome parameters among medical students in Al-Neelain University Faculty of Medicine

Tasabeeh Alnoor, Lamis Kaddam, Faris Altkena and Humeda Suekit
Al-Neelain University, Sudan

Introduction: Epidemiological evidences suggest a strong relation between birth weight and some diseases in adult life (hypertension, diabetes and Cardiovascular Diseases (CVD)). It is thought that an adverse intrauterine environment provokes adaptive response to ensure fetal survival which if persist into adulthood may cause metabolic and CVD disease.

Objectives: The aim of this study was to study association between birth weight and metabolic syndrome parameters among medical students, aiming to avail information to build the natural history of weight gain during early adulthood.

Methodology: This descriptive cross-sectional study conducted in Al-Neelain University; done as part of a larger study that examined the prevalence of obesity among 50 medical students whose birth weight data were involved in this study. Ethical approval was obtained and data (collected by questionnaire, blood pressure, anthropometric measurements and blood sample) were analyzed using SPSS (version 23).

Results: In this study Metabolic Syndrome (MetS) prevalence was 2% and 4.1% using IDF and ATP III definitions, respectively. MetS risk factors were highly prevalent 32.6%; for obesity and overweight, 48.1% for hypertension and pre hypertension. The relationship between birth weight and adulthood obesity show inverted J shape relation with a tendency for higher BMI among lower birth weight. LBW show statistical significance in relation to uncontrolled eating habit P value=0.004 when compared to appropriate birth weight. Mean value for BP was higher among large for gestational age LGA and low birth weight LBW compared to appropriate birth weight individuals.

Conclusion: It can be concluded that high prevalence of overweight/obesity as well as pre-hypertension/ HTN and an inverted J shape relationship between birth weight and adulthood obesity was found.

tasabeehabdoalnoor@gmail.com