

CONCLUSION

Individuals with high PP were susceptible to deterioration of renal function. Albuminuria partially contributed to the pathophysiological mechanism. PP could potentially be incorporated in clinical practice as an inexpensive and convenient marker of renal decline in T2D.

KEY WORDS

pulse pressure, chronic kidney disease, type 2 diabetes

OP-12

VALIDATION OF THE MODIFIED KNEE-HEIGHT AND MID-ARM CIRCUMFERENCE METHOD IN ESTIMATING BODY WEIGHT AMONG ADULT FILIPINOS

<https://doi.org/10.15605/jafes.034.02.S12>

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INTRODUCTION

Nutritional assessment, dietary prescription, and optimal dosing of medications are calculated based on body weight (BW), which is difficult to obtain in bed bound patients. Due to the unavailability of bed weighing scales, physician's estimation of BW or self-reported BW is being used which is inaccurate. Hence, this study aimed to validate the modified Knee Height (KH) and mid-arm circumference (MAC) method in estimating BW among adult Filipinos.

METHODOLOGY

This cross-sectional analytical study included 383 admitted patients. Anthropometric measurements were obtained. Accuracy of the modified KH-MAC method was determined using Bland-Altman analysis.

RESULTS

BW measurements were significantly higher using KH-MAC method compared to actual BW, by a mean of 8.94 (95% CI, 8.36–9.52) and 6.76 (95% CI, 6.22–7.31) kg as measured by 2 research associates. The least bias in BW estimates appeared to be with elderly, followed by middle and then young adults. A similar pattern is seen with body mass index (BMI) category, with bias increasing while going from the obese to underweight categories. % bias across malnutrition classifications are similar. A new equation was derived which has better weight estimates and biases were generally small (all within +/- 1.5%) across all categories.

CONCLUSION

The modified KH-MAC method overestimated actual BW. Factors having least bias in BW estimates are elderly and obese. A new equation was derived which has better accuracy and lesser biases were noted across all categories, however, this requires validation studies.

KEY WORDS

adult weight estimation, modified knee-height-mid arm circumference, Filipinos

OP-13

LEAN MASS, AGE AND SCLEROSTIN LEVELS INFLUENCE BONE HEALTH IN POSTMENOPAUSAL WOMEN WITH TYPE 2 DIABETES

<https://doi.org/10.15605/jafes.034.02.S13>

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INTRODUCTION

Osteoporosis affects 1-in-3 women aged 50 years and above. However, studies reported that people with type 2 diabetes (T2D) have more incidences of fractures than non-T2Ds. Yet, few T2D women were osteoporotic. This study aims to describe the osteoporosis status and investigate sclerostin (a signaling protein exclusively from osteocytes that prevent bone formation), lean mass and other related factors to osteoporosis in postmenopausal Malaysian women with T2D.

METHODOLOGY

We recruited 71 postmenopausal women (age 59.7±4.2 year) and measured their bone mineral density (BMD, kg/cm²), body fat (kg) and lean mass (LM, kg) using dual energy X-ray absorptiometry (DXA) and derived BMD T-scores. We obtained fasting blood measures of HbA1c (%), glucose (mmol/L) and sclerostin (pmol/L). Participants' calcium intake was also assessed using a validated food frequency questionnaire. We conducted correlation followed by multivariable regression analysis using SPSS version 24.

RESULTS

We detected only seven osteoporotic women (10%) with T-scores <-2.5 and average BMD of 1027.6±87.4 g/cm². From our correlation analyses, age ($r=-0.28$), LM (35.2±5.6 kg, $r=0.47$) and sclerostin levels (49.4±17.0 pmol/L, $r=0.25$) were significantly correlated to T-score whereas daily calcium intake (256.7±243.2 mg), menopausal age (51.4±4.1 y), years of T2D (12.3±7.6 y) and HbA1c (9.08±2.3 %) were not significantly correlated. The multivariable regression model predicted 29% ($F=9.01$, $p<0.001$) of T-score outcomes from age, LM and sclerostin levels (0.081 muscle + 0.014 sclerostin - 0.07 age - 0.693).

CONCLUSION

One-in-ten postmenopausal T2D women were osteoporotic from our study. More in-depth investigations are needed to understand these novel results of sclerostin and lean mass influence on bone status in T2D postmenopausal women.

KEY WORDS

osteoporosis, sclerostin, lean mass

OP-14

ASSOCIATION OF GLYCAEMIC CONTROL WITH PREMATURE EJACULATION AMONG TYPE 2 DIABETES MELLITUS PATIENTS ATTENDING IN A TERTIARY CARE HOSPITAL OF BANGLADESH

<https://doi.org/10.15605/jafes.034.02.S14>

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INTRODUCTION

Premature ejaculation is three times higher in diabetic population and its onset is 10 to 15 years earlier than persons without diabetes. The aim of this study was to find out the association of glycaemic control with premature ejaculation among patients with Type 2 DM attending in a tertiary care hospital of Bangladesh.

METHODOLOGY

This descriptive cross-sectional study was conducted in the outpatient department of BIRDEM general hospital from July 2017 to June 2018. A total of 225 adult patients with type 2 DM were recruited and diagnosis was confirmed as per ADA 2016 criteria. A face to face interview was conducted using premature ejaculation diagnostic tool (PEDT).

RESULTS

Mean age of patients having PE was 38.36±8.89 and age group of 60–69 years had higher incidence rate. Most of the respondents were married (73.3%). Among the study population, the prevalence of PE was 55.6%. The analysis also showed that duration of diabetes was associated with the increasing risk of PE. Almost half of PE patients (48%) were suffering from type 2 DM for more than 10 years. PE was significantly higher ($p<0.001$) among patients with poor glycaemic control (HbA1c >7).

CONCLUSION

The results provide evidence that PE is a highly prevalent sexual dysfunction among type 2 DM patients in Bangladesh. Moreover, PE largely remains underdiagnosed and untreated. The health system needs to develop appropriate strategies including early diagnosis, awareness, and health education programs for appropriate treatment.

KEY WORDS

glycaemic control, premature ejaculation, type 2 diabetes mellitus, tertiary care hospital, Bangladesh

OP-15

LIRAGLUTIDE 3.0 mg AS AN ADJUNCT TO INTENSIVE BEHAVIOR THERAPY IN INDIVIDUALS WITH OBESITY: SCALE IBT 56-WEEK RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL

<https://doi.org/10.15605/jafes.034.02.S15>

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INTRODUCTION

This 56-week, randomized, double-blind study investigated the effects of liraglutide 3.0 mg vs placebo, as adjunct to intensive behavior therapy. (IBT) and 23 counseling sessions. This reported the effects of treatment on weight change (co-primary endpoints: mean change in body weight [%] and proportion of individuals losing ≥5%), glycemic variables, cardiometabolic risk factors, safety and tolerability. Individuals aged ≥18 years with a body mass index (BMI) ≥30 kg/m² and without diabetes were randomized 1:1 to liraglutide 3.0 mg or placebo along with IBT.