

CONCLUSION

Smokers have greater risk for low plasma adiponectin level and prolonged QTc interval. Decreased adiponectin level might partly contribute to prolonged QTc interval in smokers.

KEY WORDS

smoker, adiponectin, QTc interval

OA-GE-04**SERUM LEPTIN, SERUM ESTRADIOL AND BONE MINERAL DENSITY IN OBESE AND NON-OBESE POSTMENOPAUSAL WOMEN**

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INTRODUCTION

Osteoporosis is one of the major health issues in postmenopausal women. However, it has been reported that obesity is protective against osteoporosis. There are many evidences reporting that leptin and estrogen play a role in regulation of bone metabolism. Thus, leptin and extra-gonadal estrogen have a considerable role in osteoprotective effect in obese postmenopausal women. The present study aimed to investigate the serum leptin, serum estradiol and bone mineral density in obese and non-obese postmenopausal women.

METHODOLOGY

Non-obese (age=56±2.91 year; body mass index: BMI=22.39±2.12 kg/m²; n=30) and obese postmenopausal women (age=55.03±4.03 year; BMI=31.69±2.87 kg/m²; n=30) were recruited from Hlaing-Thar-Yar Township to participate in this cross-sectional analytical study. Serum leptin and estradiol levels were determined by enzyme-linked immunosorbent assay (ELISA) and bone mineral density (BMD) was determined by quantitative ultrasound (QUS).

RESULTS

Serum leptin, serum estradiol and BMD were significantly higher in obese than non-obese postmenopausal women (leptin: 13.81±5.11 vs 4.93±2.47 ng/ml, $p<0.001$; estradiol: 109.69±35.17 vs 87.65±37.86 pg/ml, $p<0.05$; BMD: 0.10±1.20 vs -2.62±1.04, $p<0.001$). BMD had significant positive correlation with BMI in postmenopausal women ($r=0.683$, $p<0.001$, $n=60$). Serum leptin level had stronger correlation with BMD ($r=0.6$, $p<0.001$) than serum estradiol level ($r=0.28$, $p<0.05$). There is no correlation between serum leptin and serum estradiol levels.

CONCLUSION

Increased BMD in obese postmenopausal women might be due to increased serum leptin and serum estradiol levels considered as osteoprotective effects on bone metabolism. BMD had stronger association with serum leptin than serum estradiol levels and it indicated that serum leptin might have more important contribution in bone metabolism in postmenopausal women.

KEY WORDS

obese postmenopausal women, osteoporosis, leptin, estradiol, BM

OA-GE-05**THE PERFORMANCE OF PREDICTIVE INDEX FOR OSTEOPOROSIS (PIO) AND OSTEOPOROSIS SELF-ASSESSMENT TOOL FOR ASIANS (OSTA) AS A CLINICAL TOOL FOR IDENTIFYING THE RISK OF OSTEOPOROSIS IN ADULTS**

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INTRODUCTION

A new clinical tool, the Predictive Index for Osteoporosis in Men (PIO) which includes current smoking status has been recently developed to identify the risk of osteoporosis in men under 70 years old⁷.

OBJECTIVES

To compare the performance of Predictive Index for Osteoporosis (PIO) with Osteoporosis Self-Assessment Tool for Asians (OSTA) as a clinical tool for identifying the risk of osteoporosis in Filipino men 50–69 years of age and Filipino women 50–65 years of age.

METHODOLOGY

This was an analytic study that employed a cross sectional approach that included Filipino men and women seen at the Outpatient Charity Department or at the private clinics and who underwent DXA. All the subjects completed a structured questionnaire and their weight and height were obtained, from which their PIO and OSTA scores were computed.

RESULTS

A total of 81 patients were included in the study. Patients diagnosed with osteoporosis on DXA was found to have a lower BMI at less than 21. OSTA has an area under the curve of 0.712 which turns out to be significant ($p=.0004$), with a calculated likelihood ratio of 1.64. The ROC of PIO showed that the optimal cut off is >0.962 and the calculated likelihood ratio that this patient may have osteoporosis is 1.38. Comparing the sensitivity and specificity, the resulting p value of 0.2728 denotes that the AUC curve of the two tools is not significantly different.

CONCLUSIONS

PIO has similar sensitivity and specificity to OSTA in predicting the risk for osteoporosis in Filipino men and women.

KEY WORDS

osteoporosis, OSTA

OA-GE-06

PREVALENCE AND IMPACT OF METABOLIC SYNDROME ON HOSPITAL OUTCOMES AMONG PATIENTS WITH ACUTE MYOCARDIAL INFARCTION IN OSPITAL NG MAKATI

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INTRODUCTION

Each component of the metabolic syndrome raises the risk of coronary artery disease. Several studies among different ethnic groups showed a 26-66% prevalence of metabolic syndrome among patients with acute myocardial infarction (AMI). However, varying results were reported regarding its impact on various hospital outcomes. This study aims to ascertain the prevalence of metabolic syndrome among Filipino patients with acute myocardial infarction and study its impact on mortality, reinfarction, arrhythmia, heart failure and length of hospital stay.

METHODOLOGY

We conducted a cross sectional study among adult patients with acute myocardial infarction in Ospital ng Makati from March 2018 - Aug 2018. We classified patients with AMI as having metabolic syndrome based on the NCEP: ATP III 2001 and Harmonizing Definition criteria. We collected information on in-hospital outcomes such as Killip score, length of hospital stay, mortality, reinfarction and arrhythmia.

RESULTS

A total of 133 patients were included in this study. About 65% or 87/133 of the patients with AMI had metabolic syndrome. Patients with metabolic syndrome were mostly females, had larger waist circumference, higher fasting triglyceride, higher fasting blood sugar, and almost all were hypertensive. On the other hand, age, type of AMI, and HDL cholesterol level did not significantly differ between the two groups. The odds of dying among those with metabolic syndrome was 15% higher than among those without the syndrome. Furthermore, patients with metabolic syndrome were 2.5 and 1.1 times more likely to experience reinfarction and arrhythmia, respectively, than those without. However, all the odds ratios were not significant at the 0.05 significance level.

CONCLUSION

Our study confirmed the high prevalence of metabolic syndrome among Filipino patients with AMI. The most common component of MetS was hypertension while the least common component was hypertriglyceridemia. Although not statistically significant at alpha 0.05, metabolic syndrome is associated with severe heart failure, higher mortality rate, reinfarction and arrhythmia among patients with AMI.

KEY WORDS

metabolic syndrome, acute myocardial infarction, cross-sectional study