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

https://doi.org/10.15605/jafes.034.02.S66

Nang-Ei Phyo, Chaw-Su Hlaing, Mya-Thanda Sein

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/m^2; n=30) and obese postmenopausal women (age=55.03±4.03 year; BMI=31.69±2.87 kg/m^2; 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

https://doi.org/10.15605/jafes.034.02.S67

Lyza Camille Gadong, Monica Therese Cabral, Maria Leonora Capellan, Nerissa Ang-Golangco
Section of Endocrinology, Diabetes and Metabolism, Department of Internal Medicine, Makati Medical Center

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 old[7].

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.