

Serum vitamin D and the metabolic syndrome among osteoporotic postmenopausal female patients of a family practice clinic in Jordan

Nada Yasein¹, Wejdan Shroukh² and Razan Hijjawi²

¹University of Jordan, Jordan

²Jordan University Hospital, Jordan

Introduction: Vitamin D deficiency and insufficiency and the metabolic syndrome are two common health issues worldwide. The association between these two health problems is subject to debate.

Objective: This study aims to investigate the association between vitamin D deficiency or insufficiency and the metabolic syndrome in a sample of osteoporotic postmenopausal women attending a family practice clinic in Amman – Jordan.

Methodology: This was an observational cross sectional study. It was carried out in the family practice clinic in Jordan University Hospital. The study included all postmenopausal osteoporotic women attending the clinic between June 2011 and May 2012, yielding a total of 326 subjects. The association between metabolic syndrome and serum vitamin D levels was investigated.

Results: Waist circumference, body mass index, triglycerides and fasting blood sugar were significantly higher among postmenopausal women with metabolic syndrome, but HDL cholesterol was significantly lower ($p<0.05$). The prevalence of metabolic syndrome among all study participants was 42.9%. Triglycerides and LDL cholesterol were significantly higher among women deficiency or insufficiency ($p<0.05$). The prevalence of vitamin D deficiency or insufficiency was 45.7%. Among patients with metabolic syndrome, the prevalence of vitamin D deficiency or insufficiency was 50.7%.

Findings: Current study suggests a lack of relationship between serum vitamin D and metabolic syndrome. However, a significant inverse relationship was found between serum vitamin D levels and both serum triglycerides and LDL levels.

Biography

Nada Yasein has gained her certificate in Family Practice MRCGP (The Royal College of General Practitioners) in May 1994. She is Jordanian Board Certified in Family Practice in November 2001. She is a Professor at the Family and Community Medicine Department in the University of Jordan. She is the Head of the Family Medicine Department in Jordan University Hospital. She has published more than 30 papers in reputed journals.

nyasein_85@hotmail.com

 Notes: