

Vitamin D Status in Type 2 Diabetic and Pre-Diabetic Patients

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Objective: To assess the serum vitamin D level in type 2 diabetic and pre-diabetic patients.

Design: A Cross-Sectional Study.

Setting: National Center for Diabetes Endocrinology and Genetics (NCDEG), Jordan.

Method: All type 2 DM and pre-diabetes patients were eligible for inclusion in this study. The study was conducted from 1 October 2011 to 31 January 2012.

The total sample size was 1,181 patients. Six hundred eighty-one patients had type 2 diabetes and 500 had pre-diabetes. Medical records and direct interview by the investigator or his colleagues were the sources of data.

Three thousand seven subjects aged 13 years and above were selected as a control group from the data of the National Study of Vitamin D and B12, which was conducted in Jordan in 2009.

Result: The mean age was 53 (± 10) years. Seven hundred fifty-eight (64.2%) were females, 681 (57.7%) were type 2 diabetic and 500 (42.3%) were pre-diabetic. Low serum vitamin D level (vitamin D < 30 ng/ml) was seen in 467 (68.8%) of the diabetic patients and in 381 (76.2%) pre-diabetics compared to 1,101 (36.6%) in control group. The main risk factors associated with low serum vitamin D level were lack of sun exposure and milk consumption.

Conclusion: Low serum vitamin D level is highly prevalent among type 2 diabetes and pre-diabetes subjects. The two most important risk factors for low serum vitamin D level were lack of sun exposure and low milk consumption.

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