



Correlation of vitamin D with HbA1c in CAD diabetic and non CAD diabetic patients in India

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Biography:

Vinay Singh has completed his PhD in Medicine from Faculty of Medical Sciences, University of Delhi, India and MBA in Project Management from Sikkim Manipal University, New Delhi and also one year full time Advance Post Graduate Diploma in Clinical Research from Clinical Research Education and Management Academy, India.

Abstract:

Vitamin D deficiency is a major concern across the globe. Evidence indicates that vitamin D supplementation can improve health condition in several diseases including diabetes. The objective is to find out the correlation of vitamin D with HbA1c in Coronary Artery Disease (CAD) diabetic and non CAD diabetic patients in northern India. This is a cross-sectional study conducted in the Department of Medicine and Department of Biochemistry, Maulana Azad Medical College, New Delhi, India and included 324 type-2 Diabetes Mellitus (T2DM) patients of age 50 years and above who have a history of diabetes for more than five years. Patients who were already taking vitamin D supplements were excluded from this study. Patients were equally divided into two groups. Group-1: CAD diabetic (N=162), group-2: Non CAD diabetic (N=162). Height, weight, BMI, waist circumference, Vitamin D was measured in all patients. SPSS software was used to analyze the data. The correlation coefficient was calculated in both groups with respect to vitamin D and HbA1c. An inverse relation has been observed in CAD Diabetic (r value -0.0794) and non CAD diabetic (r value -0.011) when it was compared with vitamin D values. In our study, we found that patients having higher vitamin D levels have better glycemic control and have lower HbA1c values. Therefore, vitamin D supplementation can improve glycemic control in diabetic population.