

# 8<sup>th</sup> Annual Pharma Middle East Congress

October 10-12, 2016 Dubai, UAE

## Serum zinc among Sudanese with type-2 Diabetes Mellitus in Khartoum State

Rayan Salah Elhadi

Medical Sciences and Technology University, Sudan

Diabetes mellitus is an inherited metabolic disorder characterized by high metabolic and oxidative stress, and there is evidence that trace elements such as zinc and copper are important co-factors in these processes. We therefore have measured serum zinc levels in type 2 Diabetic subjects from Khartoum state. 20 Diabetic patients and 20 non-diabetic control subjects were included in this study. Serum zinc and random blood glucose (RBG) were measured among the study groups and the association of Zn compared with glycemic status, age, gender, and duration of diabetes. The serum zinc level was significantly higher (P-value=0.02), ( $2.01 \pm 0.999$  ppm) in diabetic patients as compared with control subjects ( $1.83 \pm 0.704$  ppm) respectively, There was insignificant association between study groups among the age (P-value=0.35) and gender variables (P-value=0.518). Also there was significant association with glycemic status, and duration of diabetes (P-value=0.000) with serum Zinc in the type-2 diabetic patients. We conclude that the zinc values were increased significantly, especially in diabetes mellitus with long duration of disease. Another studies show low zinc level so, further studies are recommended to address the possible role of zinc measurement and the possible impact of zinc therapy in insulin metabolism resistance states such as diabetes.

### Biography

Rayan Salah Elhadi has completed her Bachelor's degree from University of Medical Sciences and Technology, Master degree at Institute of Endemic Diseases, University of Khartoum. She is currently a Teaching Assistant of Chemical Pathology at Medical Sciences and Technology University, Sudan.

RAYAN2344@hotmail.com

### Notes: