

## Homocysteine and lipid parameters in diabetes mellitus

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The association between Plasma homocysteine concentration and metabolic parameters were evaluated in sixty cases of Type 2 Diabetes Mellitus patients (30 with cardiovascular complications and another 30 without cardiovascular complications). Cases were randomly selected from patients attending Diabetic clinic and Medicine Ward, RIMS, Imphal. Another thirty age and sex matched normal volunteers were taken as control. Plasma Homocysteine was estimated by ELISA (Axis-Shield Diagnostic, UK). Statistical analysis was done to find out the co-relation using multiple linear regression and ANNOVA. The mean  $\pm$ SD serum homocysteine levels of the T2DM patient with cardiovascular complications and T2DM without cardiovascular complications were found to be significantly higher than the control subjects. Mean  $\pm$ SD of homocysteine level was  $27.20 \pm 6.02$  mmol/l and  $18.03 \pm 4.6$  mmol/l in the two sub groups of the cases compared to  $9.36 \pm 1.70$  mmol/l in the controls. Homocysteine is positively co-related with total cholesterol ( $r=0.121$ ,  $p<0.05$ ) and negatively co-related with HDL level ( $r=-0.166$ ,  $p<0.05$ ). A positive correlation is found between the serum homocysteine level and blood pressure. Homocysteine and Dyslipidaemia increase the cardiovascular risk significantly in T2DM. Homocysteine may be estimated as a prognostic indicator to assess the risk of developing cardiovascular complications.

### Biography

Chanchal Lamabam has completed her MBBS in 2005 from Regional Institute of Medical Sciences, Manipur and pursuing postgraduate in Biochemistry Department, RIMS since 2011

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