

Study of Association of Serum Lipids with Diabetic Retinopathy in Type 2 Diabetes Mellitus

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Abstract:

The present study was conducted to find out the role of serum lipids in the development of diabetic retinopathy in type II Diabetes Mellitus. One hundred fifty subjects aged 30-70 years attending OPD at Old Civil hospital, Surat, participated in the study and were divided into three groups. Group I included 50 healthy non-diabetic subjects who served as control. Group II included 50 diabetic subjects with no signs of diabetic retinopathy and Group III included 50 diabetics with diabetic retinopathy. Funduscopy under homatropine was done in all the subjects. Serum triglycerides and total cholesterol were estimated by enzymatic methods and High Density Lipoprotein by precipitation method. Serum Low density lipoprotein was calculated using Friedewald's formula. It was found that triglyceride levels were significantly raised ($p < 0.05$) in subjects with diabetic retinopathy as compared to those without diabetic retinopathy showing a positive association of Triglycerides with the incidence of diabetic retinopathy. Whereas no such association was found between low density lipoprotein and total cholesterol levels with the prevalence of diabetic retinopathy.