

CROSS SECTIONAL STUDY APPROACH TO DIABETIC RETINOPATHY AND ITS RISK FACTORS AMONG TYPE-II DIABETES MILLETUS

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ABSTARCT

The levels of hemoglobin A1c (HbA1c) for long duration are important risk factor for progression to high risk proliferative diabetic retinopathy and decreased visual acuity. Intensive glycemc control for long duration (HbA1c levels normal or near normal) could be reduces the risk of retinopathy significantly. In this context the present study aims to study the risk factors correlate with hba1c among diabetes patients at rural set up medical college and research Institute, Kuppam,Andrapradesh. The study was undertaken in patients with type 2 diabetes who attended the outpatient department (OPD) of ophthalmology or referred from medicine OPD during the study period. 180 type-II DM patients were screened for diabetic retinopathy in PES medical college and hospital, kuppam. A total of 180 type 2 diabetic patients were enrolled in the study (110 males) (61.00%) 70 females (39%). The mean age was 55.32+10.111 years. Mean duration of diabetes was 5.927+4.87 years. The prevalence of diabetic retinopathy among type 2 diabetic patients was 30.5% (55 out of 180 patients). Male preponderance was present among DR patients (32 cases were males (58.2%) while 23 cases (41.8%) were females. Out of 55 diabetic retinopathy patients, 45 patients (81.81 %) had non proliferative diabetic retinopathy (NPDR) while 10 patients (18.18%) had proliferative diabetic retinopathy (PDR). Diabetic maculopathy was seen in 5 patients (9.09%). Duration of diabetes and diastolic blood pressure have shown a positive association with retinopathy. These results were statistically significant $P=0.0001$ and $P=0.002$ respectively. Our study has shown a higher prevalence of diabetic retinopathy in patients on insulin and a combination of insulin and oral hypoglycemic agents (OHA) (42.85% and 64.28% respectively) in comparison to patens on OHAs alone or on no medication. Random blood sugar among patients having diabetic retinopathy was 236.145+87.239mg/dl and was significantly higher than patients not having retinopathy 139.288+40.488mg/dl ($P=0.001$). There was no statistical significance between family history and diabetic retinopathy in our study ($P=0.722$)

KEYWORDS: Prevalence, Diabetic retinopathy, Risk Factors, Hypoglycemia

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