

VISUALIZATION OF DIABETIC RETINOPATHY IN RELATION TO ITS RISK FACTORS-EXPERIENCED AT RURAL SET UP REFERRAL HOSPITAL

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ABSTRACT

The prevalence of type-II diabetes is known to be very high in the Indian subcontinent. Indian patients demonstrate certain distinct features i.e. onset at a younger age, a strong genetic predisposition and less common obesity. Patients with diabetic retinopathy (DR) is 25 times more likely to become blind than non-diabetics (WHO report 2014). Indian diabetics is therefore of great interest and very few studies are available on the prevalence of diabetic retinopathy from India. Nearly all patients with type 1 DM and more than 60% of type 2 DM have some diabetic retinopathy after 20 years of onset of diabetes (NIHFW's report 2013). The study was undertaken at Department (OPD) of Ophthalmology or referred from Medicine OPD, PES Medical college and hospital, Kuppam during the study period (2013-2014). A Type-II diabetes who were attended the Out Patient a total 180 type -II diabetic patients were enrolled for the study males 110 (61.%) females 70 (39%) was considered for the study, institutional ethical clearance were obtained from the competent authority. As per the results the Mean age was 55.32+10.11 years. Mean duration of Diabetes was 5.927+4.87 years. The Prevalence of Diabetic retinopathy among type-II diabetic patients was 30.5% (55/180 patients). Male preponderance was present among DR patients comprises males 32/180 (58.2%) and 23/180 (41.8%) were females respectively. Out of 55 diabetic retinopathy patients, 45 patients (81.81%) were Non Proliferative Diabetic retinopathy (NPDR), while 10 cases (18.18%) were seen proliferative diabetic retinopathy (PDR). The Diabetic maculopathy was seen in 5 patients (9.09%). Duration of diabetes and diastolic blood pressure were found to be positive association with retinopathy. The prevalence were statistically significant ($P<0.00$) respectively. The Present study were found to be a higher prevalence of diabetic retinopathy among patients on Insulin therapy and a combination of both Insulin was 42.85% and Oral hypoglycemic Agents was (OHA) (64.28%) and it was occluded to present significant difference between the risk factors and older age of the patients. A random Blood sugar was recorded at the time of study period and it was found to be statistically insignificant differences was found between the age and gender. Among diabetic retinopathy patients the random blood sugar was 236.145+87.239 mg/dL, and it was significantly higher ($p<0.01$) than patients without retinopathy 139.288+40.488 mg/dL.

Conclusions

Early detection, inception of therapy, and Laser intervention could reduce the incidence of retinopathy. Proper dietary practice is able to reduce the glycemic level. Further research will be needed to evaluate the incidence of retinopathy at larger population level

KEYWORDS: Retinopathy, Non Proliferative Diabetic Retinopathy, Proliferative Diabetic Retinopathy