

# **DETERMINANTS OF RETINOPATHY IN DIABETICS 2004**

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## **ABSTRACT**

Diabetes Mellitus (DM) is among the most important chronic non communicable disease in the world. Diabetes related complications account for a great deal of morbidity and mortality. Diabetic eye disease is the leading cause of blindness in developed countries. Nearly entire of type 1 and 75 percent of type 2 DM patients will develop retinopathy after a 15 year duration of diabetes. Hence, an analysis of the risk factors that lead to development of the eye disease in diabetics can help in preventing or delaying the onset of retinopathy.

A hospital based case control study was conducted in the Regional institute of ophthalmology, Trivandrum from September to December 2007, covering 174 Diabetic retinopathy patients and 253 diabetes patients without retinopathy as controls. The subjects were interviewed using a semi structured questionnaire. Study variables included diabetic age, control of blood glucose level, insulin use, hypertension, hyperlipidaemia,. History of exacerbation of symptoms after and attack of viral fever, co existing renal disease, smoking and alcoholism.

Hypertension was found to be a major player in causing retinal damage in diabetics. Patients with poor glycaemic control, those with a longer duration of diabetes, and those consuming more meat were found to be at increased risk of developing retinopathy. These findings reveal the need for early detection of retinal changes in diabetics, which calls for periodic screening of diabetics at risk. This along with a good control of blood sugar levels, blood pressure and diet can help in considerably decreasing the risk of developing retinopathy in Diabetes Mellitus patients.

