POST GRADUATES ABSTRACTS

PG -36 : CENTRAL MACULAR THICKNESS IN DIABETICS WITHOUT RETINOPATHY: A CROSS-SECTIONAL STUDY

Sindhuja Murugesan, Final year postgraduate
Department of Ophthalmology,
Mahatma Gandhi Medical College & Research Institute, SBV, Pondicherry

Background: Diabetic maculopathy is the major cause for visual impairment in type 2 diabetics. Slit lamp biomicroscopy with +90 D lens has been the traditional method for diagnosis. Neurodegenerative changes precede clinical retinopathy. Optical coherence tomography (OCT) is a newer tool for diagnosis of such subtle changes in the macula. The purpose of this study is to assess the central macular thickness (CMT) in type 2 diabetics without clinical retinopathy.

Methods: Prospective cross-sectional study was done at a rural tertiary care centre from January 2016 to June 2017 after obtaining clearance from the Institutional Human Ethics Committee. CMT was measured using Spectral Domain SLO/OCT [Opko/OTI, Inc., Miami, Florida] among the type 2 diabetics without clinical retinopathy. **Results:** This study included 104 patients (44 males, 60 females). Mean age of males was 53.66±10.85 years and females were 48.63±7.09 years. Duration of diabetes ranged from newly diagnosed to 15 years. Mean HbA1c was 8.99±2.51%. The average CMT among type 2 diabetics without retinopathy was 199.10±17.78µm. The CMT among male diabetics was thicker (208.35±16.14µm) than female diabetics (192.33±15.85µm) (p=0.00). CMT did not correlate with duration of diabetes (r=0.047) or with the glycemic control (r=0.107). **Conclusion:** Among type 2 diabetics without clinical retinopathy, males had thicker CMT than females. CMT did not correlate with duration of diabetes or with the glycemic control.

Keywords: Type 2 diabetes mellitus, Diabetic maculopathy, Central macular thickness and glycemic contro