ABSTRACT

Purpose:

To assess the subfoveal choroidal thickness in different stages of Diabetic retinopathy using enhanced depth imaging optical coherence tomography.

Methodology:

A total of 42 eyes from 21 patients from the retina department who had type 2 diabetes mellitus with diabetic retinopathy were divided into three groups: mild NPDR, Moderate NPDR, Severe NPDR, PDR and DR with CSME. In addition, 46 eyes of 25 healthy individuals comprised a control group. Choroidal thickness was measured from the posterior edge of the retinal pigment epithelium to the choroid/sclera junction subfoveally and at 500-μm temporal and nasal to the fovea.

Results:

The mean subfoveal choroidal thickness is 238.91, 257.42, 287.33 and 313 μm in mild NPDR, moderate NPDR, severe NPDR and PDR respectively. Mean subfoveal choroidal thickness was greater in the PDR group than the other DR groups. The subfoveal choroidal thickness was greater in the DR with CSME group (284.38 micrometres) than the the DR with no CSME group (254.26 micrometres). The mean age was 47.24 years and 56.05 years in the
control and DR groups, and the subfoveal choroid was greater in the control group (311.32 micrometres) than the DR group (260 micrometres).

**Conclusions:**

Subfoveal choroidal thickness increased as the DR severity worsened and the thickness was found to be greater in the PDR group. There was a statistically significant difference between the DR with CSME groups and the DR with no CSME groups.

**Key words:** CHOROID THICKNESS, SUBFOVEAL, EDI –OCT, Diabetic retinopathy