MACULAR AND RETINAL NERVE FIBER LAYER CHANGES IN FMF PATIENTS: A SD-OCT STUDY
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AIM: Recently some vascular changes have been reported in familial mediterranean fever (FMF) patients. We have aimed to study the macular thickness and retinal nerve fiber layer of patients with (FMF) by a non invasive method: optic coherence tomography (OCT) to evaluate possible changes in these structures.

METHOD: In this observational cross-sectional study 46 patients with FMF (The FMF group consisted of four groups by genetic classification) and 49 healthy volunteers were included. Optical coherence tomography was performed with the Optovue technology. The fast RNFL thickness (3.4) scan, MMS and GCC acquisition protocols were used.

RESULTS: The FMF patients (30 females, 16 males, mean age: 38.31±7.74, min: 19, max: 56) and the control group (31 females, 18 males, mean age: 34.89±12.70, min: 16, max: 60) were not significantly different in terms of distribution of sex (p=0.84) and age (p=0.11). The mean of length of FMF history was 5.78±5.33 years.

The macular thickness in different zones was significantly thinner in all zones except central foveal and the inferior perifoveal areas (p<0.05) in the FMF group as compared to the control. The RNFL thickness was significantly different only in the superior hemisphere (p=0.02) and the superior quadrant (p=0.05). None of the parameters studied had any significant correlation with the length of FMF history (p>0.05).

CONCLUSION: We have observed decreased macular thickness and RNFL thickness in superior quadrants in this study. This may be related to possible retinal vascular problems that should also be confirmed by longitudinal studies about retinal circulation.