Purpose: To evaluate the early retinal changes and its reflection on the visual field examination in Hepatitis B patients using pegylated interferon therapy.

Patients and Methods: Eighteen eyes of nine patients with chronic hepatitis B were examined prospectively for changes in the fundus examination and visual field examination (both Humphrey Perimetry and Frequence Doubling Perimetry). The patients were examined before and in 3 months intervals after starting the pegylated interferon treatment. The changes in the fundus examination were noted and the visual field examinations, retinal nerve fiber thickness, Schirmer scores and color vision before and at 3 months of the treatment were compared. The statistical evaluation was performed with paired- t test, using SPSS 16.0 Inc.

Results: The mean age of the 9 patients (5 female, 4 male) was 52.1±12.6. There was no significant retinal change in none of the patients. Neither the visual field examination with Humphrey Field Analyser nor the frequency doubling perimetry results has demonstrated any changes during 3 months follow-up. There was statistically significant increase in the retinal nerve fiber layer thickness; while Schirmer test scores for dry eye assessment was significantly decreased.

Conclusion: Pegylated interferon therapy, which is used for treatment of chronic hepatitis B, may cause some changes in the thickness of retinal nerve fiber layer that may necessitate the close follow-up for further morphological changes of the optic disc in these patients.