IS THERE AN ASSOCIATION BETWEEN TEAR IGF-1 LEVELS WITH CENTRAL CORNEAL THICKNESS AND INTRAOCULAR PRESSURE MEASURES IN PATIENTS WITH ACROMEGALY

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Purpose: To measure tear insulin-like growth factor 1 (IGF-1) and to evaluate the impact of tear IGF-1 levels on intraocular pressure (IOP) and central corneal thickness (CCT) in patients with acromegaly. Methods: We included 31 acromegaly patients (study group) and 40 age and gender matched controls (control group) to the study. Acromegaly patients were divided into 2 subgroups based on disease status (active/inactive). All participants underwent complete ophthalmological evaluation including CCT and IOP values. Basal tear samples were collected from both groups and tear IGF-1 levels were measured. Demographic and clinical characteristics of groups and subgroups were compared. The association between tear IGF-1 levels with ocular parameters (CCT, IOP) and disease duration were also evaluated between study and control groups. We also did not find a significant difference in terms of CCT, IOP and tear IGF-1 levels between subgroups of patients. In correlation analysis we did not find a correlation between the duration of disease and tear IGF-1 levels with CCT and IOP. Conclusion: There was no significant difference in tear IGF-1 levels between acromegaly patients and controls, additionally, there was no correlation between disease duration and tear IGF-1 levels with CCT and IOP levels. This lack of association may suggest that tear IGF-1 levels might not have a significant effect on CCT and IOP findings in acromegaly patients. Financial Disclosure: No