

THE EFFECT OF COVID-19 HOME CONFINEMENT ON MYOPIA PROGRESSION IN CHILDREN

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Purpose: The aim of this study is to investigate the effect of COVID-19 Home Confinement on the increase of myopia in the pediatric age group.

Methods: For this purpose, the files of myopic patients under 18 years of age who were examined in the outpatient clinic in the last year were analyzed retrospectively. Subjective refraction values determined from the patients' files in 2018, 2019, 2020 and 2021 examinations between March and May were examined. Myopic progression over the years was analyzed by calculating the manifest refraction spherical equivalent (RMSE) value. Exclusion criteria were ocular disease, refractive error of 1 diopter or more, degenerative myopia, ocular surgery history, ocular trauma history, and collagen tissue disease.

Results: The mean age of 310 patients who met the criteria included in the study was 15.08 ± 2.02 years, and 218 (70.3%) were female and 92 (29.7%) were male. The mean MRSE values of the patients were found to be -1.83 ± 1.19 in 2018, -2.14 ± 1.26 in 2019, -2.46 ± 1.36 in 2020 and -3.12 ± 1.36 in 2021. Accordingly, between 2018-2019, -0.31 ± 0.21 D ($P < 0.001$), between 2019-2020 -0.31 ± 0.25 D ($P < 0.001$), between 2020-2021 -0.65 ± 0.29 D ($P < 0.001$) it was observed that there was an increase in myopia.

Conclusion: Although myopia in childhood seems progressive at all times, it has progressed more significantly during the COVID-19 Home Confinement, possibly with the effect of spending more time in closed environment and increasing indoor activity.