

## **ABSTRACT**

The purpose of this study was to document the progression of myopia and the axial elongation in a cohort of myopic patients and to estimate the interrelations of these factors. A total of 810 polish children (512 females and 298 males) with diagnosed myopia aged between 7 and 18 years were investigated. All patients underwent detailed ophthalmic examination including biometry and autorefraction. The examinations were repeated every 6-8 months. The study confirmed a strong correlation between the axial elongation and the progres of myopia. The highest increase of the axial elongation and the myopic refractive error was tended in the age between 11-13 years old. The progres of myopia moderated with age. We created a model of simulated progres of myopia, which can be improved in future research studies and used for better control and treatment.