## **Myopia Survey**

## **Results of the HSIOIRS Myopia Survey**

We present the intention and practice of Greek ophthalmologists and optometrists regarding the management of myopia, as reflected in the HSIOIRS survey questionnaire.

A total of 139 people responded, of which 101 are ophthalmologists (72.7%), 19 pediatric ophthalmologists (13.7%), 7 trainees (5%) and 12 optometrists (8.6%).

The majority of them (71.9%) reports that less than 10% of the children they examine under the age of 6 have myopia. 60% of participants find myopia in children aged 6-12 years at a rate of 10-30%. Myopia occurs at ages older than 6 years according to 93.5% of respondents. The most common rate of increase in myopia per year is 0.25-0.50D according to 49.6% and 0.5-1D according to 41.7%. A higher rate of increase was observed by 2 colleagues.

The majority (82.7%) were positive about starting treatment that would reduce the progression of myopia. The most common reasons for starting treatment were high myopia at diagnosis (10.8%), rapid rate of progression (48.2%), young age at diagnosis (15.8%) and a combination of the above (50.4%). Two participants report that they would never start treatment.

The majority (60.4%) would start pharmacological therapy, while 15 participants would start with orthokeratology (10.8%) and 19 (13.7%) with multifocal lenses. A person would use specialized EDoF technology contact lenses and multifocals. The drug treatment of choice for 65.5% is atropine 0.01%, while 18% prefer 0.1%. At a rate of 1.4% they prefer concentrations stronger than 1%. Cyclopentolate 1% was chosen by 6.5% of participants. One person would choose a concentration of 0.05%. Most would choose the treatment based on clinical studies (59%) and safety (36.7%), while 5% based on experience. The main criteria for stopping the drug would be the appearance of side effects (66.2%), the decrease in the effectiveness of the drug (41.7%), patient non-compliance (25.2%) and old age (12.2%).

When asked which factors are the most basic for the appearance and progression of myopia, most agree that genetic predisposition and hours of close work play a primary role (82.7%), followed by the use of mobile phones and tablets (69.1%) and the time spend outdoors (36%). Female gender and vitamin D were found to be strongly associated. A stronger correlation is considered based on the survey to be heredity followed by long hours of work on screens and less time the child spends outdoors. Despite this, the overwhelming majority of participants recommend that parents increase time outdoors, followed by a decrease in screen use and frequent breaks. Finally, 82% of the participants state that they approached children differently depending on their family history and special characteristics.

In conclusion, the positive attitude of ophthalmologists and optometrists regarding the initiation of treatment in order to manage the progression of myopia is encouraging. Most would use pharmacological therapy, mainly atropine 0.01%, which would be discontinued mainly if side effects occurred. An important role in the management of myopia is also played by the counseling of parents in relation to the time children spend outdoors, the reduction of screen time as well as breaks during near vision activity.

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