

## Study of Side Effects of Myopia Contact Correction by Soft Lenses and Orthokeratology Lenses among Medical Students

**Authors :** K. Iu. Hrizhymalska, O. Ol. Andrushkova, I. Iu. Pshenychna

**Abstract :** Aim. To study and compare the side effects of myopia contact correction by soft lenses and orthokeratology lenses among medical students. Patients and methods: 34 students (68 eyes) with moderate and severe myopia, who used contact correction of myopia for 2-4 years, were examined. Some of them used soft lenses, while others - orthokeratology lenses. Methods were used: biomicroscopy of the eye surface, Schirmer's test, Norn's test, survey regarding satisfaction with use. Results. Corneal vascularization along the limbus was noted in 4 (5%) eyes of the examined students. In 8 (11%) eyes, symptoms of mild dry eye disease were detected. 2 (3%) eyes showed signs of meibomitis. Allergic conjunctivitis was observed in 4 (5%) eyes, and a purulent corneal ulcer was present in 1 eye. Surveys have shown that orthokeratology lenses unlike soft lenses don't limit everyday activity (in sports, tourism, swimming etc.), they also don't cause discomfort during temperature changes and reduce existing symptoms of dry eye disease. Conclusion. Thus, myopia contact correction is one of the optimal options among students, which allows to expand physical and mental activity. However, taking into account the frequency of side effects in users of soft contact lenses, it is necessary to carry out prevention and treatment of myopia in medical students, follow the recommendations for use, instill preservative-free tear substitutes with trehalose when symptoms of dry eye appear. Also when side reactions occur, contact correction with soft lenses should be changed to orthokeratology lenses.

**Keywords :** correction, myopia, soft lenses, orthokeratology, spectacles, cornea, dry eye, side effects, refractive errors

**Conference Title :** ICOO 2024 : International Conference on Ophthalmology and Optometry

**Conference Location :** Rome, Italy

**Conference Dates :** May 02-03, 2024