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Stability orientation of soft toric silicone hydrogel contact lenses with different types of ballast

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Relevance. Number of rebounds toric soft contact lenses in recent years has increased dramatically worldwide and was one-fourth of all prescriptions daily wear contact lenses for primary patients. According to the British Contact Lens Association, 2013, now soft toric lenses today are 35-40% of contact lens wearers in Australia, USA, UK and Canada.

Purpose. To improve the quality of vision and patient satisfaction, leading an active lifestyle and dealing with dynamic sports with clinically significant astigmatism, to assess the stability orientation of soft toric silicone hydrogel contact lenses with different types of ballast.

Materials and Methods . Selection of soft contact lenses toric implemented persons 21-36 years with myopic astigmatism of 0.75 D to 2.25 D data Gender : Women ( 65%), men ( 35%). Carried out the following diagnostic tests : assessment of physical and physiological landing lens (Axis Auto Ref-Keratometer TSRK- 100 , PP EUCARIS terascience, ast tests), measurement of the orientation marks and stability of the position of the contact lens trial Norn , Schirmer test . All patients were divided into two groups , depending on the used soft toric lenses ( MCL) . The first group of patients (n = 31) used MAS Toric Air Optix for Astigmatism with stabilization Precision balance 8/4 , the second study group (n = 29 ) - Acuvue Oasys for Astigmatism with accelerated stabilization design .

Results. In both groups noted: full coverage of the cornea MAS adequate mobility (0.2-0.4 mm), with a smooth glide Push-up test, the optimal position of the orientation marks. Temporary stabilization target in the first lens group was 58,2 ± 2,1 s, and the second - 56,2 ± 2,1 s (confidence differences between the indices p> 0,05). Toric soft contact lenses designed for astigmatism need adequate fixation axis positions on the eye.

Conclusions. In our view, confidence in the selection of soft toric contact lenses for patients with active lifestyles gives acceleration stable orientation of the lens, providing sufficient transport of oxygen to the cornea and a simplified procedure for selection.