

Estudo piloto sobre resposta de curto prazo corneal à terapia corneal refractiva da miopia de efeitos refractivos distintos.

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Objectivos: O objectivo do presente estudo é investigar as variações de curto prazo na topografia e espessura central corneal nas 3 primeiras horas de uso de lentes de contacto em condições de olho aberto e o efeito da regressão três horas após retirar a lente.

Métodos: Adaptou-se a 14 voluntários as lentes da Paragon CRT® simulando dois efeitos de compensação refractiva diferente -2.00 D e -4.00 D no olho direito e esquerdo de forma aleatória. Após a colocação das lentes de contacto media-se a topografia e a espessura corneal ao fim de 30, 60 e 90 minutos. As mesmas medidas eram repetidas nos mesmos intervalos de tempo após retirar as lentes.

Resultados: 30 min após a colocação das lentes é significativo o aplanamento da córnea e a diminuição da espessura central da córnea. De um modo geral, as mudanças verificadas no grupo de -4.00 D são mais rápidas que o grupo de -2.00 D. As diferenças entre os dois grupos são evidentes a partir dos 60 min de uso das lentes. As diferenças entre os olhos adaptados com os efeitos de -2.00 e -4.00 dioptrias de miopia são evidentes unicamente após os primeiros 30 minutos de tratamento para a queratometria plana, após 60 minutos de tratamento para o raio apical e excentricidade e para a espessura corneal central após retirar as lentes.

Conclusões: Em condições de olho aberto os primeiros 30 min da terapia corneal refractiva são determinantes para o estabelecimento

dos efeitos ortoqueratologicos sendo as mudanças praticamente idênticas para os 2 grupos refractivos. Após os 30 min iniciais as alterações dependem do efeito da compensação refractiva. A recuperação é praticamente tão rápida como o início dos efeitos ortoqueratologicos.

Short-term corneal response to corneal refractive therapy for different refractive targets. A pilot study.

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Purpose: The goal of the present study was to investigate the short-term variations in corneal topography and central corneal thickness within the first 3 hours of lens wear under open-eye conditions and the regression of the effect of the orthokeratologic effect after 3 hours period after lens removal.

Methods: Fourteen volunteers were fitted with Paragon CRT® rigid contact lenses simulating two different refractive targets of -2.00 D and -4.00 D correction in the right and left eyes, in random order. After the lenses were placed in both eyes, subsequent measurements of corneal topography and central corneal thickness were obtained at 30, 60 and 90 minutes; same measurements were also obtained at 30, 60 and 180 minutes after lens removal.

Results: Significant flattening of the central cornea was observed after 30 minutes of lens wear. Overall, the changes progressed more rapidly in the -4.00 D group than in the -2.00 group and they also required more time to recover after lens removal. Differences between -2.00 and -4.00 D treatments are evident only after 60 minutes of lens wear with flat keratometry and apical power, and after 30 minutes of visit; apical power, and central corneal thickness after lens removal displayed the larger discrepancies.

Conclusions: Under open-eye conditions, the first 30 minutes of corneal refractive therapy are determinant for the establishment of the myopic orthokeratologic effect and

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