Research of myopia progression after posterior sclera reinforcement for pathologic myopia

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**Purpose:** The aim of this study was to assess the progression of axial length and the axial length/corneal radius of curvature ratio changes after Posterior Scleral Reinforcement (PSR) for pathologic myopia.

**Method:** This retrospective study enrolled 89 pathologically myopic eyes treated with PSR. Axial length, refractive error, Best Corrected Visual Acuity (BCVA), corneal radius of curvature, and the axial length/corneal radius of curvature ratio were evaluated before and 1-year after the surgery.

**Results:** There were significant improvements in BCVA after the surgery, but no statistical differences in refractive error before and after the surgery. Significant differences were found in the axial elongation progression and axial length/corneal radius compare to the pre-operation. The average axial length/horizontal corneal radius of curvature ratio significantly decreased in one year after operation.

**Conclusion:** The PSR surgery can effectively delay the axial elongation in pathological myopia. Axial length/horizontal corneal radius of curvature ratio significantly decreased, which may indicate less myopic progression after surgery.

**Biography**

Hongwei Deng has received her BD and MD in Medicine from Zhengzhou University in 1995 and 1999, respectively and has received the PhD from Jinan University, Guangzhou, China in 2002. She has advanced her clinical experience in pediatric ophthalmology field as an observer training for 6 months in Wilmer’s Eye Institute in John Hopkins University and Boston Children’s Hospital. Now, she is the Dean of the low vision department in Shenzhen Eye Hospital, also works in the pediatric ophthalmology field from 2007 till now. She was a visiting scholar and a postdoctoral researcher for one year in Schepens Eye Research Institute in 2017. Her research interests include stereo vision and vision induced diseases.

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