Management of scleral lenses in pediatric age

Antonella Vecchies
University of Padua, Italy

Scleral lenses are large diameter rigid gas permeable lenses that range from 14 mm to over 20 mm in diameter. Scleral lenses completely cover the cornea and extend onto the sclera and are supported by the conjunctival tissue. Pediatric patients with keratoconus, pellucid marginal degeneration, post-penetrating keratoplasty, corneal scarring or ocular surface disorders are most appreciative of the benefits of scleral lenses. In cases of ocular surface disease or persistent epithelial defects, scleral lens wear can facilitate healing and corneal health. The goals of scleral lenses fitting in pediatric age are visual rehabilitation for refractive errors, protection the ocular surface and reducing symptoms in severe ocular surface disease. The benefits of scleral lenses are a great stability and centration on ocular surface without any touch in the cornea. To obtain corneal clearance the recommended overall lens diameter is at least 2 mm larger than the corneal diameter. It is necessary that the sagittal depth of the initial lens selected be greater than the sagittal height of the cornea. The elevation of an individual cornea may be measured using topographical elevation data, anterior segment OCT imaging. The OCT permits to evaluate with a great precision central corneal clearance, limbal clearance and haptic zone.

Biography

Antonella Vecchies has done her Master’s degree in Vision Science from the University of Padua. She is an Optometrist and has done her specialization in contact lenses for the irregular cornea and in pediatric population. She has also worked at the Children's Hospital Burlo Garofolo (Trieste-Italy).

antonellavecchies@gmail.com

Notes: