Kids and CL’s: Toric Ortho-K
Ryan Witt

School, sports, music, video games, and movies – kids are busier than ever. When this population presents to your office with an astigmatic refractive error, several corrective options are available:

- Spectacles
- Rigid Gas Permeable Lenses
- Soft Toric Lenses
- Orthokeratology

While the first three options are tried-and-true solutions, don’t forget about orthokeratology. Until recently, orthokeratology with higher amounts of astigmatism would leave patients with residual cylinder and the associated aberrations. Additionally, centration was hard to achieve on a toric cornea. This can now be addressed with designs like the Paragon dual-axis system. Benefits of dual axis orthokeratology include:

- Use on corneas up to ~1.75D of toricity
- Toric orthokeratology lenses were shown to slow axial elongation in moderate-to-high astigmatic children
- Lens wear at night only, with the possibility of every other night
- Convenience and cosmetic factors of not wearing spectacles
- No need to carry contact lens care products to activities
- Similar risk to other overnight vision correction modalities

The prevalence rate of astigmatism is approximately 28 percent for children 5 to 17 years of age in the United States. This means eye care professionals will be encountering these cases on a relatively frequent basis. While no single option is right for everybody, it is important to present all options to the child and parents.

References:

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