Fitting more astigmatic patients the right way; dispelling the myths about toric lenses

Nick Dash, Director of Loughborough University's Visual Edge Optometric Practice in the UK – which specialises in sports vision, refractive surgery, and contact lens fitting – believes that many astigmatic patients are missing out on an opportunity to improve their visual performance because of historical difficulties with first-generation torics and the myths surrounding toric lenses subsequently created.

Although 45% of all contact lens wearers have a 0.75 cylinder or more, only a quarter of soft lens wearers in Europe are prescribed lenses specifically designed for astigmats. This prescribing practice has improved dramatically in recent years, however, these figures reveal that many eye care professionals (ECPs) still choose to ‘mask’ the astigmatism with SVS lenses instead of correcting the underlying problem using torics.

Dispelling the myths surrounding toric lenses

Nick Dash outlined some of the main reasons why many ECPs currently choose to mask astigmatism in low cylinder patients rather than using a soft toric lens. He urged practitioners to forget the past and look at current evidence supporting modern toric lenses in order to overcome any residual concerns.

Specifically, Nick addressed historical issues concerning vision quality, cost, comfort, and chair time, and he provided scientific evidence that these myths can now be dispelled thanks to the availability of new toric lenses.

‘New toric lenses have overcome many historical issues, offering better reproducibility and stability, improved comfort and ease of fitting, and better all-round optical quality,’ stated Nick.

Is vision with toric lenses significantly better than single vision spherical (SVS) lenses for low astigmats?

According to Nick, evidence from recent studies, and his own personal experience, confirms that, contrary to some views, soft toric lenses are actually far better than SVS lenses in low cylinder patients. He presented results from a study showing that, unlike SVS lenses, soft toric lenses increased visual acuity by an average of one line, and nearly all patients fitted with them (97%) achieved 20/20 vision. An impressive 67% also achieved 20/15 vision or better.

‘Our patients expect us to offer the best – not the second best’, says Nick. ‘We should really be striving to achieve 20/15 vision in these individuals, and, as we can see from this study, spherical lenses simply aren’t up to the job.’
Is the higher cost of toric lenses a barrier to patient acceptance?

In another study Nick described, 114 low cylinder patients (over half of whom had their cyls masked by their ECP) were given the choice of a soft toric lens or an SVS after all the features and benefits of each were discussed, and a phoropter demonstration had been conducted to simulate the difference in vision. Even after the cost of the lenses was revealed, 96% of patients chose to purchase the soft toric lens, indicating that cost is rarely a barrier to toric acceptance when the benefits are made clear.

‘We need to stop talking about cost and start talking about value,’ urged Nick. ‘Vision is our most important sense and we should encourage our patients to think about that and not compromise their vision.’

Is vision with aspheric lenses good enough to correct low levels of astigmatism?

Nick presented the findings from a study by Morgan et al (2005), which was designed to compare the visual performance of a soft toric lens, an aspheric lens, and spectacles, in patients with low levels of astigmatism. It was reported that both high- and low-contrast visual acuity was universally superior with the soft toric lenses, with the superiority increasing with increasing pupil size (Figure 2). The study concluded that superior vision can be achieved for low astigmatic patients wearing toric soft lenses rather than aspheric lenses.

The soft toric lens came out top in all measures, and, importantly, it retained its performance across the pupil size range,’ says Nick. ‘This study should dispel the myth that aspheric lenses are good enough for astigmatic patients.’

Are toric lenses as comfortable as spherical lenses?

Significant advances have been made in the design of modern toric lenses to enhance lens comfort and improve patient satisfaction and retention. These advances, according to Nick, have led many patients to prefer soft toric lenses to SVS lenses, which should significantly reduce patient dropouts – a major issue with astigmatic patients in the past.

‘If I’m honest, I did not expect toric lenses to be as comfortable as their spherical equivalents, but I have been proved wrong time and time again,’ he said. ‘I now have no hesitation in using a toric in one eye and an SVS in the other, as I know patients will not notice any differences in comfort.’

Do toric lenses require more chair time?

Nick believes that the availability of new toric lenses with innovative design features that improve their rotational stability and predictability, will reduce chair time in the long-run. He presented the findings from a large-scale clinical trial involving over 5600 astigmatic eyes that were fitted with soft toric lenses, and reported that 93% of eyes had acceptable fitting characteristics with a single fitting parameter, and 96% of the lenses fitted had acceptable levels of rotational stability when fitted empirically.

‘It takes no more time to fit toric lenses than spherical lenses,’ he told the meeting. ‘Over 90% of patients I fit empirically from their spectacle correction orientate correctly, and this predictability reduces initial chair time and reduces unscheduled visits.’
Experience with SofLens® daily disposable Toric for Astigmatism

The eye care experts who attended this meeting had the opportunity to trial the new SofLens® daily disposable Toric for Astigmatism, which is now available across Europe. The new advanced aspheric lens has been designed using Bausch & Lomb's innovative Lo-Torque™ technology to give astigmatic patients a more complete level of vision performance. The use of ComfortMoist™ technology can also ensure all day comfort.

Enhanced visual acuity and performance

The group confirmed the importance of vision quality for all astigmas but in particular those patients who have a lower level of astigmatism. They discussed whether a lens that combined both toroidal correction along with spherical aberration control would be a helpful addition to the groups' contact lens portfolio. The SofLens® daily disposable Toric for Astigmatism is the first daily disposable contact lens for astigmatism also designed to reduce spherical aberration.

The aspheric anterior surface is designed to reduce spherical aberration across lens powers and improve contrast of the retinal image. Visual acuity and performance may also be enhanced as a result of the Lo-Torque design. Over the years, Bausch & Lomb's Lo-Torque designs have collectively become the world's number one selling toric designs.

‘I have found that the vision with this lens is excellent. The stabilisation is good, the orientation mark is very clear, and I can predict with some certainty where the lens will stabilise,’ said Nick Dash.

Ease and predictability of fit

The group agreed that it is important to make the fitting of this category of patients, straightforward and successful first time, to ensure that practitioners do not perceive fitting astigmas as complex. The ECPs at this meeting agreed that the predictability of fit, and knowing that the lens will stabilise in position first time were two of the new lens' most important attributes.

Excellent comfort and easy handling

Happy patients ensure success of the practice. Comfort, both upon insertion and end of day, are important considerations for the patient along with how easy the lens is to handle. Several unique design features – including the use of ComfortMoist™ technology – ensure that the SofLens® daily disposable Toric for Astigmatism offers all day comfort. Use of non-ionic lens material, a 360° comfort chamfer, a thin design and moisture-rich

‘This lens is excellent. The best lens available in this category on the market. No question about that.

The technology is excellent and I particularly like the stability of the lens and the fact that it gives fuller vision correction. My patients were very happy with it,’ said Vittorio Roncagli, Optometrist, Italy.

‘The lens is easy to fit and comfortable for the patient. Most importantly for me is that it provides excellent vision,’ said Bernd Bastel, Optometrist, Austria.

‘The lens stabilises in seconds. It's so easy to use,’ said Fabio Delgado, Optometrist, Spain.

‘I have found that the ease with which I can fit these lenses and their predictability of fit actually reduces chair time,’ said Nick Dash, Optometrist, UK.