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Visual Outcomes after Implantation of the RayOne Trifocal Intraocular Lens

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Allon Barsam is a Consultant for Rayner. There are no other financial interests

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Purpose

- To assess the efficacy and safety of bilateral implantation with the Rayner RayOne Trifocal Intraocular lens.

Methods

- Retrospective, Single-centre, Single Surgeon evaluation. Subjects underwent bilateral refractive lens exchange or cataract surgery with RayOne trifocal intraocular lenses (Rayner, United Kingdom). Preoperative manifest refraction, and uncorrected visual acuity at far, intermediate, near distances were compared with follow-up at 1 week and 1 month . Dysphotopsias, quality of vision issues and other adverse events were reported.

Results (I)

- 65 patients with mean age 63.0 ± 12.3 years were included. One month following surgery, average binocular UCDVA for 126 eyes was -0.097 ± 0.11 logMAR and UCNVA for 118 eyes was +0.19 ± 0.06 logMAR. All patients achieved an intermediate visual acuity of N6. All patients experienced mild night time halos that were non-disabling.

Figure 1: Unaided Distance Vision using the Rayner RayOne Multifocal IOL in 126 eyes

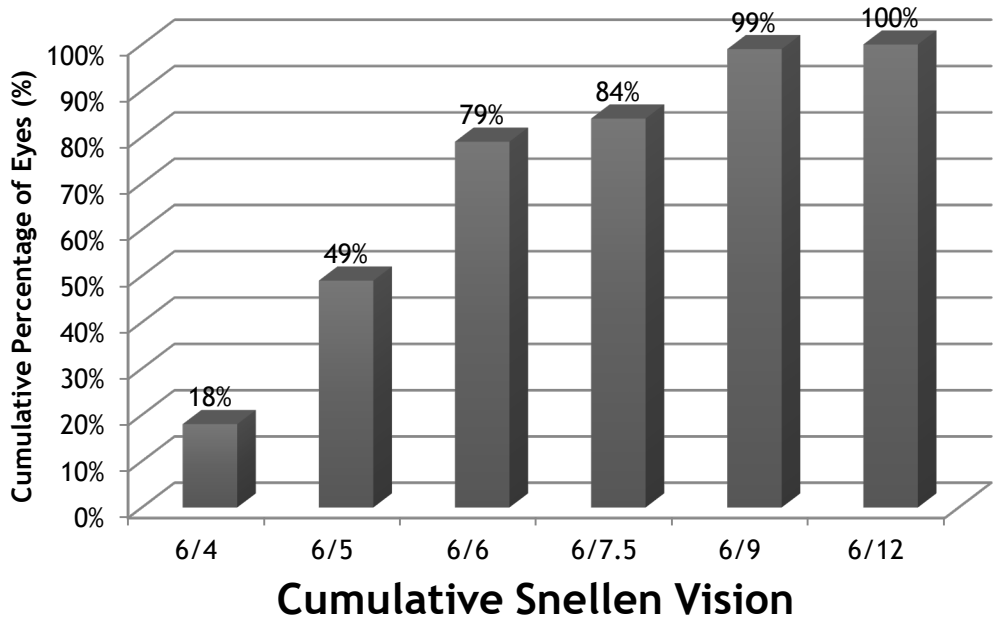
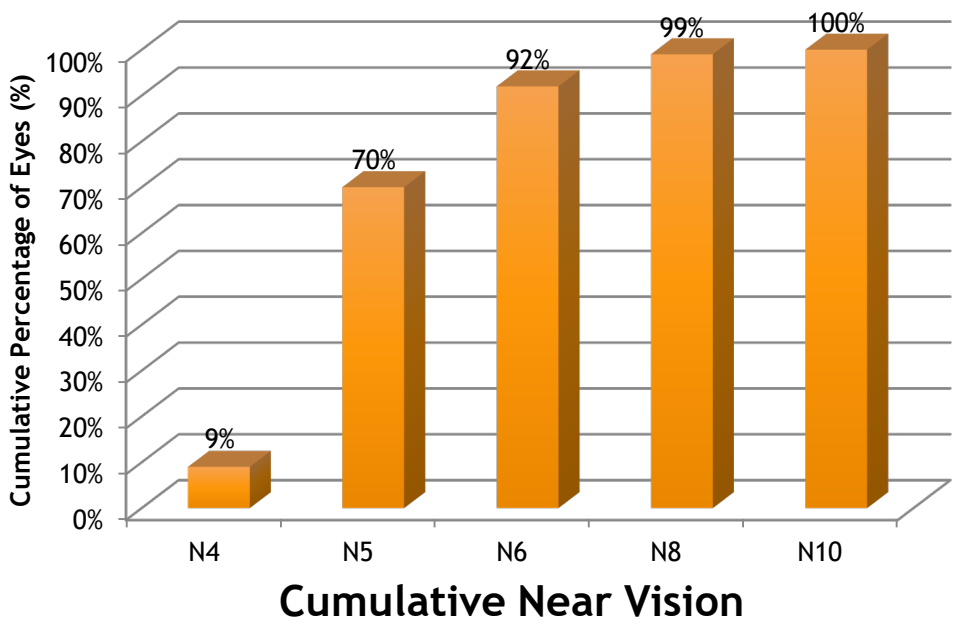


Figure 2: Unaided Near Vision using the Rayner RayOne Multifocal IOL in 118 eyes



Results (II)

Figure 3: Unaided Binocular Distance Vision using the Rayner RayOne Multifocal IOL in 65 Patients

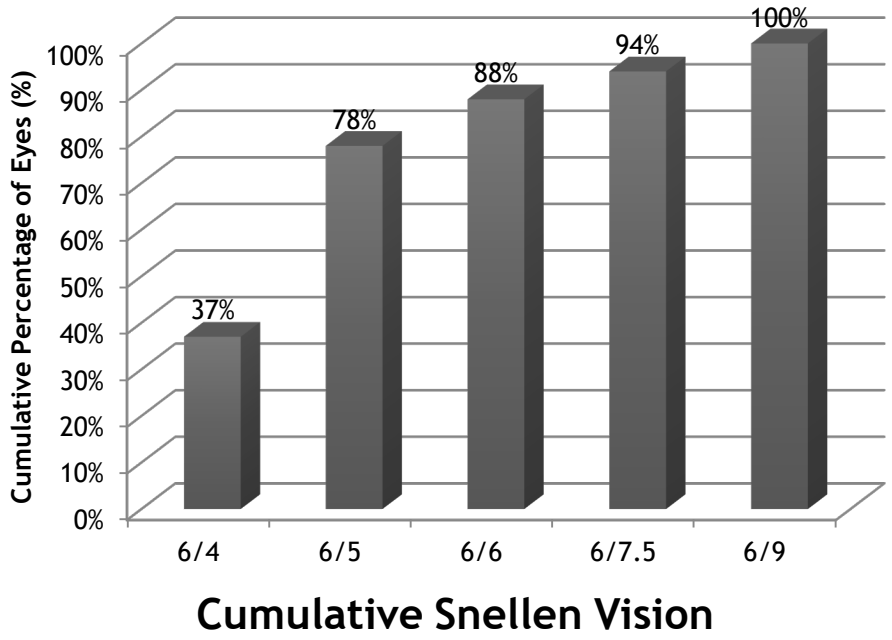
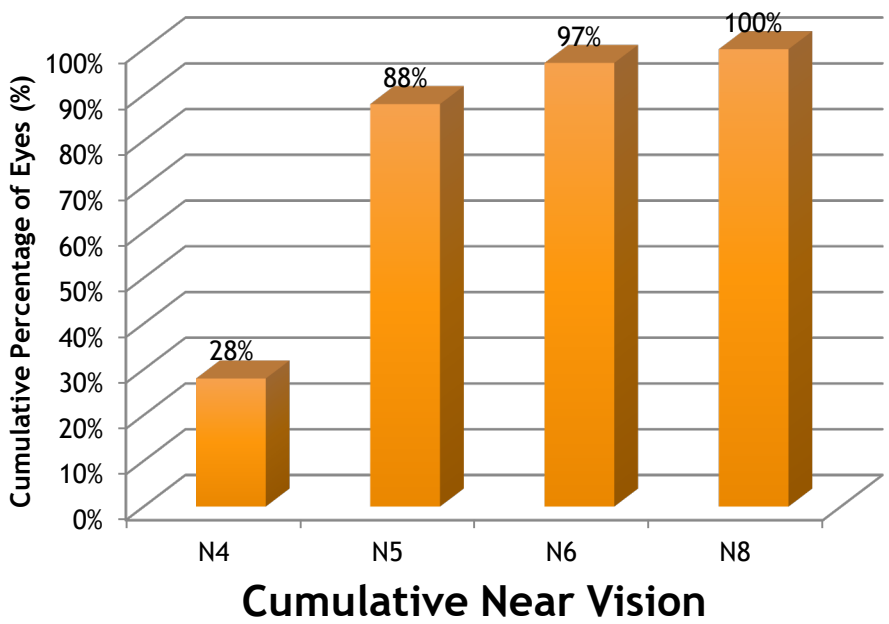


Figure 4: Unaided Binocular Near Vision using the Rayner RayOne Multifocal IOL in 65 Patients



Conclusion

- Implantation of the Rayner RayOne trifocal intraocular lenses allows for safe and accurate restoration uncorrected near, intermediate, and distance visual acuity for patients undergoing IOL implantation.