



## Unveiling the Pseudo-Astigmatism Dilemma: A Critical Look at Refraction Assessment Post-trabeculectomy

Isiaka Sanni Oluwasegun\*

Department of Optometry and Vision Therapy, Makkah Specialist Eye Hospital,  
Albasar International Foundation Nigeria, Nigeria

**\*Corresponding Author:** Isiaka Sanni Oluwasegun, Department of Optometry and Vision Therapy, Makkah Specialist Eye Hospital, Albasar International Foundation Nigeria, Nigeria.

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As a seasoned eye care practitioner specializing in clinical optometry and vision therapy, my unwavering commitment to improving the visual well-being of patients has driven me to delve into the intricacies of post-trabeculectomy refractive challenges. The observed exaggerated refractive errors post-trabeculectomy demand a critical reevaluation of our practices, urging us to blend clinical expertise with a patient-centered, interdisciplinary approach.

Trabeculectomy, a cornerstone in glaucoma intervention, has historically proven effective in lowering intraocular pressure and preserving vision. However, my clinical experience has uncovered a pressing concern – the emergence of with-the-rule astigmatism following conjunctiva closure or bleb formation during surgery.

Subjective refraction findings consistently challenge objective assessments, unveiling a pattern of pseudo-astigmatism in post-trabeculectomy patients. This surgical-induced astigmatism carries profound implications for accurate refraction, as reliance solely on objective measurements risks overcorrection, resulting in diminished visual acuity and patient discomfort. Such unintended consequences significantly impact patient satisfaction and, in essence, contradict the very essence of improving their quality of life through surgery.

The dilemma lies in the inadequacy of traditional objective refraction assessments to capture the nuances of post-trabeculectomy eyes. The irregularities introduced by conjunctiva closure or bleb formation create a refractive landscape that deviates from the norm, challenging the conventional approach to prescribing corrective lenses based on objective measurements alone.

To address this challenge, a paradigm shift is imperative in our approach to refraction post-trabeculectomy. Integrating subjective findings and understanding the unique challenges of pseudo-astigmatism is paramount for delivering optimal patient care. The combination of objective and subjective data enables tailored refractive prescriptions, mitigating the risk of overcorrection and ensuring a smoother visual rehabilitation process.

This discovery emphasizes the importance of patient education and communication. Managing expectations becomes paramount as we navigate the postoperative period with our patients. Acknowledging potential challenges posed by pseudo astigmatism and explaining the intricacies of refractive changes post-trabeculectomy can alleviate concerns and foster a collaborative approach to vision correction.

Beyond clinical implications, addressing exaggerated refractive errors post-trabeculectomy calls for continued research and collaboration within the ophthalmic community. Developing specialized protocols and guidelines for refraction assessments in these cases can contribute to a more standardized and effective approach.

Moreover, exploring innovations in surgical techniques that minimize the impact of pseudo-astigmatism is crucial. Collaborative efforts between optometrists, ophthalmologists, and researchers can drive advancements, aiming to reduce the occurrence of exaggerated refractive errors and improve overall visual outcomes for patients undergoing trabeculectomy.

Patient-centered care must remain our priority. Empowering patients with knowledge about potential refractive changes

post-trabeculectomy allows them to make informed decisions. Providing realistic expectations and transparent communication between practitioners and patients fosters trust and enhances the overall patient experience.

As we adapt our clinical practices, ongoing professional education is essential. The integration of information about pseudo astigmatism and its implications into the training of optometry and ophthalmology professionals ensures continuous learning and collaboration, contributing to a collective expertise that better serves post-trabeculectomy patients.

In conclusion, recognizing the presence of exaggerated refractive errors post-trabeculectomy is pivotal for refining our approach to patient care. Acknowledging the challenges posed by pseudo-astigmatism and embracing a holistic, patient-centered strategy allows us to navigate this terrain with precision and empathy.

Moving forward, let us unite in our commitment to advancing eye care, ensuring that every patient, whether pre or post-trabeculectomy, receives the highest standard of visual care. Through collaborative research, education, and a patient-centric approach, we can revolutionize the way we address exaggerated refractive errors post-trabeculectomy, ultimately enhancing the quality of life for those we are privileged to serve.