

Troubleshooting Lens Intolerance with EyePrintPRO

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Background:

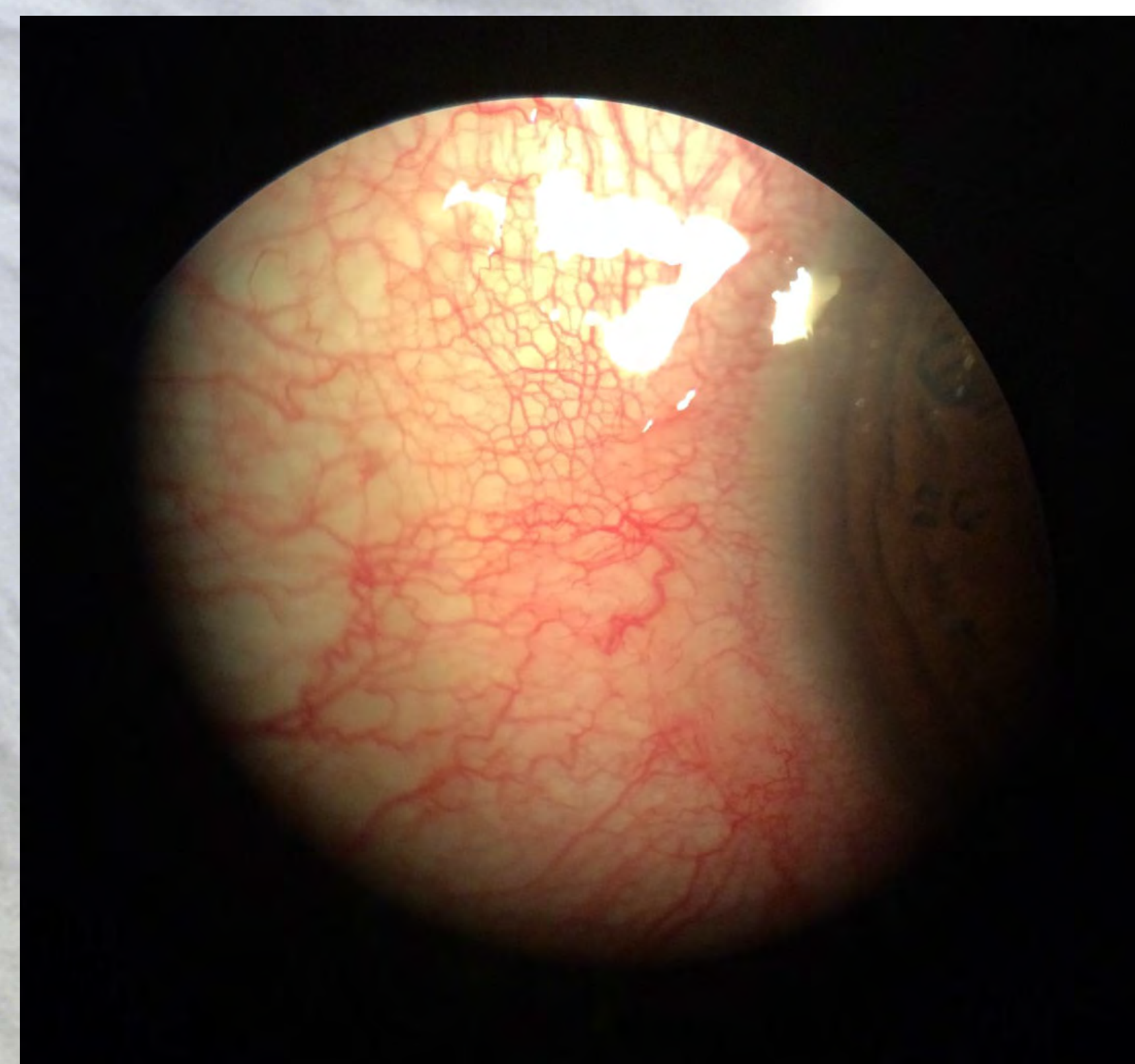
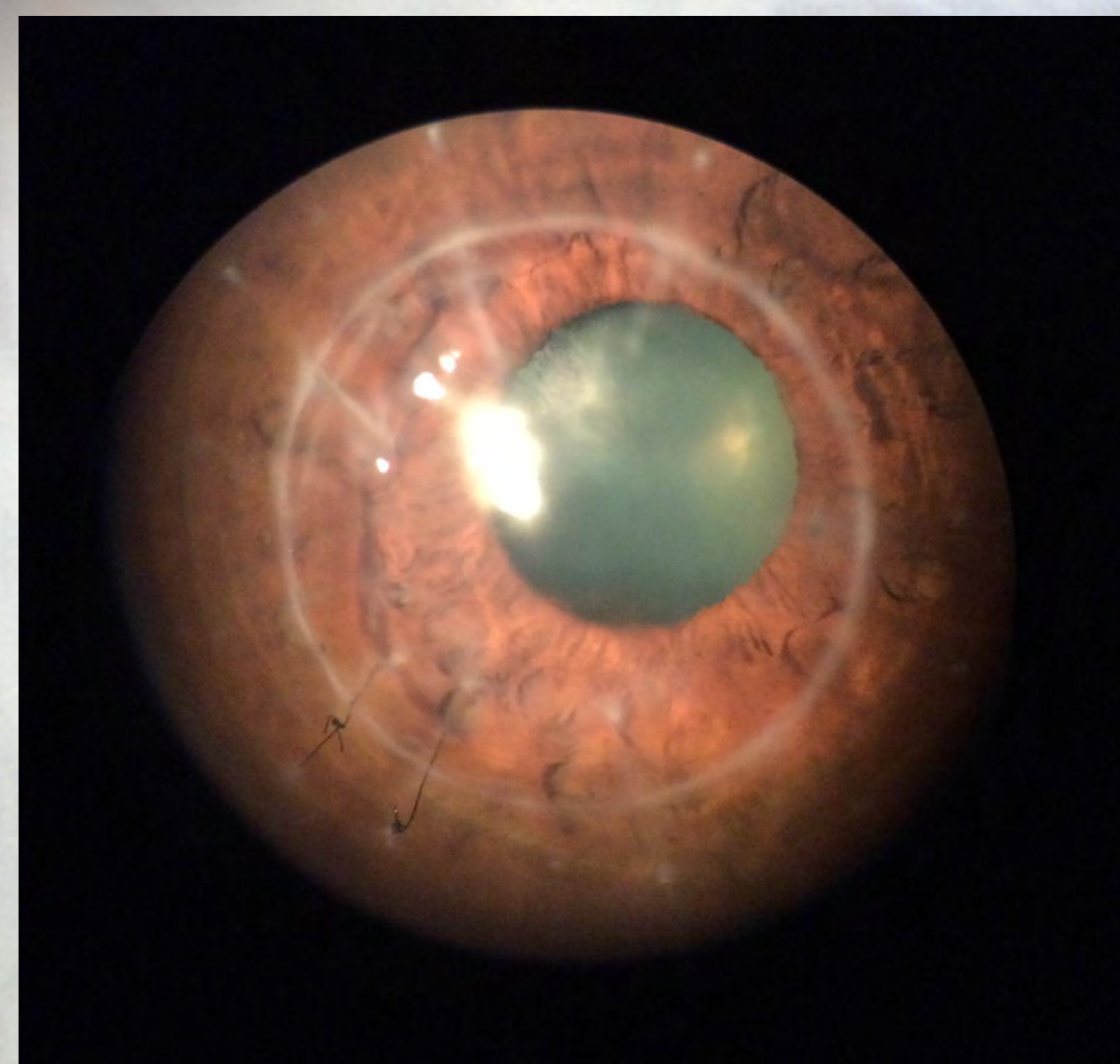
EyePrint Prosthetics (EyePrintPRO) is a prosthetic scleral lens designed to match the exact contour of the anterior eye.

The difference between a traditional scleral lens and EyePrintPRO is in the design process, where an impression of the ocular surface is made and scanned with a 3D scanner. The result is a custom made scleral shell to match the unique irregularities of the eye.



Case Presentation:

55-year-old white male presents for a specialty contact lens fitting of the right eye. The patient has a history of penetrating keratoplasty (PK) due to a fungal corneal ulcer. The patient had previously been fit with a Jupiter scleral lens but was unable to wear for more than two hours without severe discomfort. The discomfort stemmed from a pinguecula located temporally that was constantly inflamed from mechanical rubbing of the scleral contact lens. Despite many efforts to avoid the inflamed area, a comfortable fit was not achieved with the Jupiter scleral contact lens.

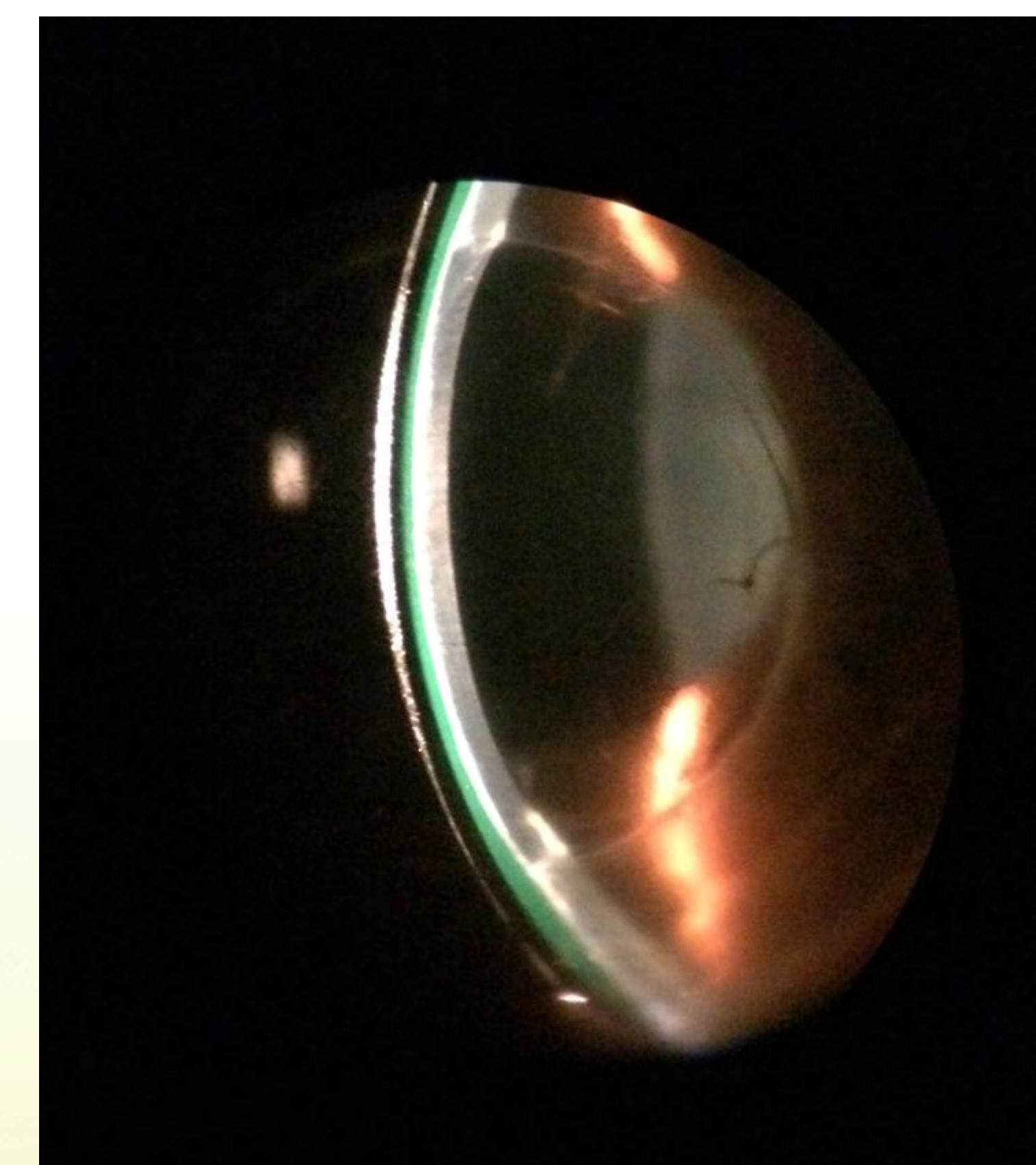
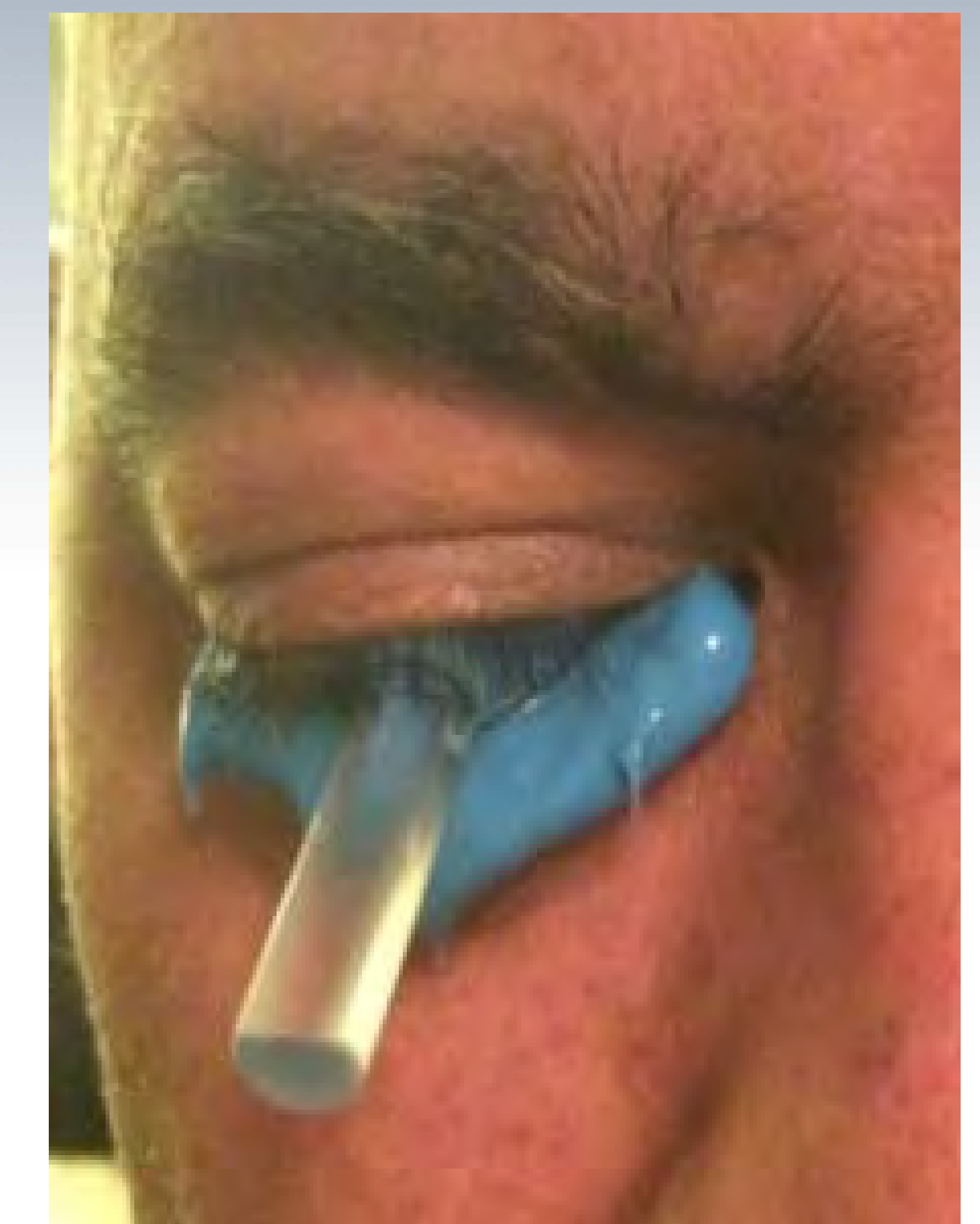


Treatment and Plan:

Corneal topography and slit-lamp examination were performed prior to the molding process in order to assess the anterior surface of the eye. The best treatment plan was to fit the patient with an EyePrintPRO prosthetic lens via ocular surface impression with silicone molding putty.

Discussion:

- Indicated for:
 - keratoconus
 - pellucid marginal degeneration
 - Irregular astigmatism
 - ocular surface disease
 - post surgical corneas
 - Chemical burns/trauma
 - pinguecula/pterygium
 - stem cell failure
 - normal corneas
- Decreases aberrations
- Impression takes a few minutes
- Impression shipped to lab for digitizing and 3D scanning
- Result is an individualized prosthetic scleral cover shell
- Matches cornea and sclera of printed eye
- Manufactured in a high oxygen permeable material to provide optimal comfort, vision and health.



Conclusion: The EyePrintPRO is an option for hard-to-fit corneas that are unable to achieve an acceptable fit with a standard scleral lens. It is especially helpful with anterior irregularities due to the 3D scanning technology. An appropriate fit, providing optimal vision and all day lens comfort was achieved with EyePrintPRO in this case.