Post-Infectious Keratitis Thinning

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We report the case of an 82-year-old female with a corneal scar in the left eye (OS) due to a contact lens-related ulcer in May 2023. At her initial consultation on July 4, 2023, her best-corrected visual acuity was 20/40 in the right eye and counting fingers in the left eye. Examination revealed cataracts and narrow angles in both eyes, and cataract surgery was recommended. The patient underwent cataract extraction in the left eye on August 16, 2023, followed by surgery in the right eye on September 27, 2023. At her most recent evaluation on January 16, 2024, her visual acuity was 20/30 in the right eye and 20/200 in the left eye. Infectious keratitis is a leading cause of visual impairment and blindness globally, particularly affecting marginalized communities. Corneal opacities, primarily resulting from infectious keratitis, rank as the fourth leading cause of blindness worldwide.

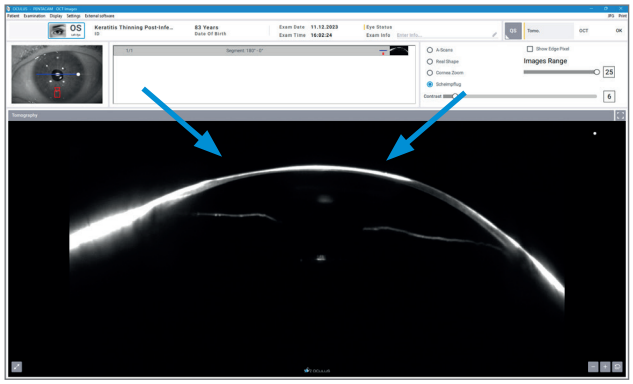

Fig. 1: Pentacam Cornea OCT Scheimpflug image in OS – The Scheimpflug image shows a highly reflective area, but no details about the extent of the infiltrates or scarring caused by the infectious keratitis. The thinning of the cornea is clearly visible.

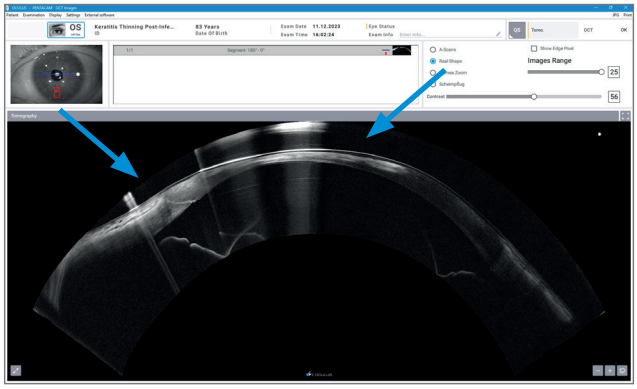

Fig. 2: The real-shape image of the Pentacam Cornea OCT in OS shows the diseased area, which covers almost the entire cornea, and the incision is also clearly visible.

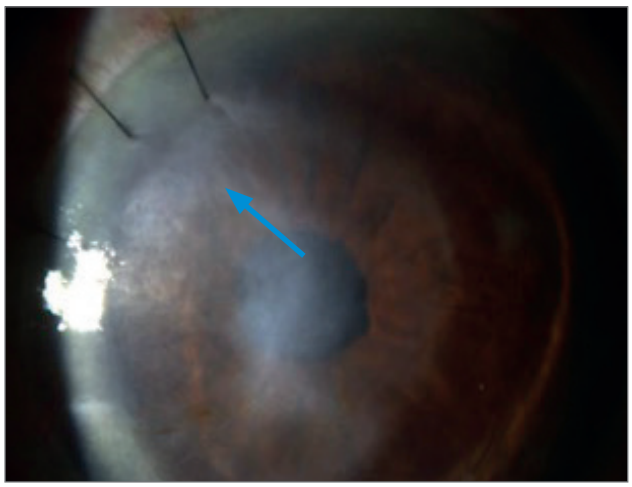

Fig. 3: The slit lamp photo shows the sutures of the surgical incision

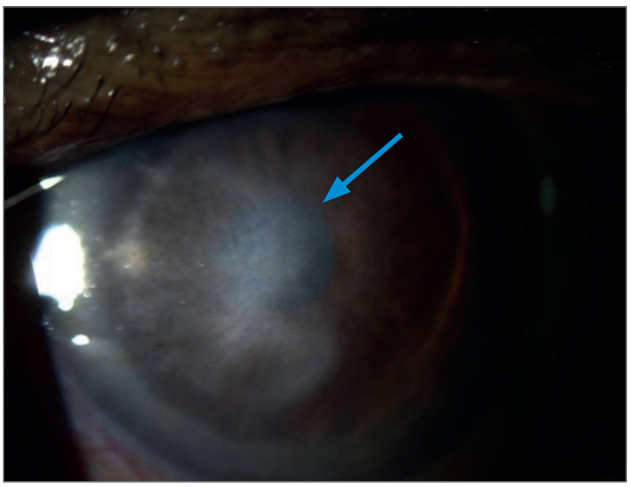

Fig. 4: Slit-lamp image OS showing the opacity that covers a large part of the cornea

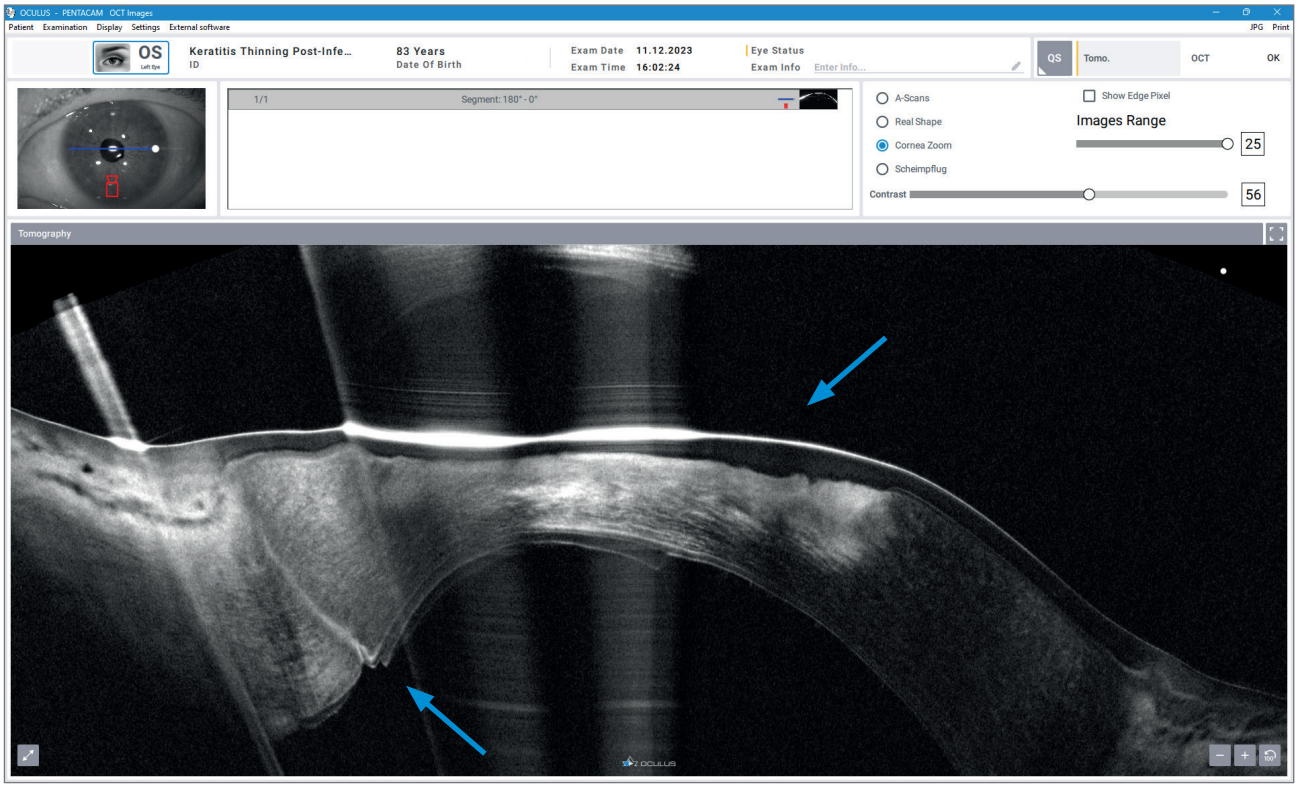

Fig. 5: Pentacam Cornea OCT – Corneal Zoom Image of the Left Eye (OS). The extent of the pathology is clearly visible on the OCT image. The scarring extends deep into the corneal stroma. The Bowman's layer appears disrupted over a large area of the cornea. The surgical incision is also clearly visible.

The new Pentacam Cornea OCT helps to detect and measure the true extent of the disease. It thus supports the choice of treatment options.