

# Two Cases of Spontaneous Reattachment of Descemet's Membrane

Kendall E. Donaldson, Sarah R. Wellik

The authors have no financial interest in the subject matter of this poster

**POSTER: 3071**

# Introduction

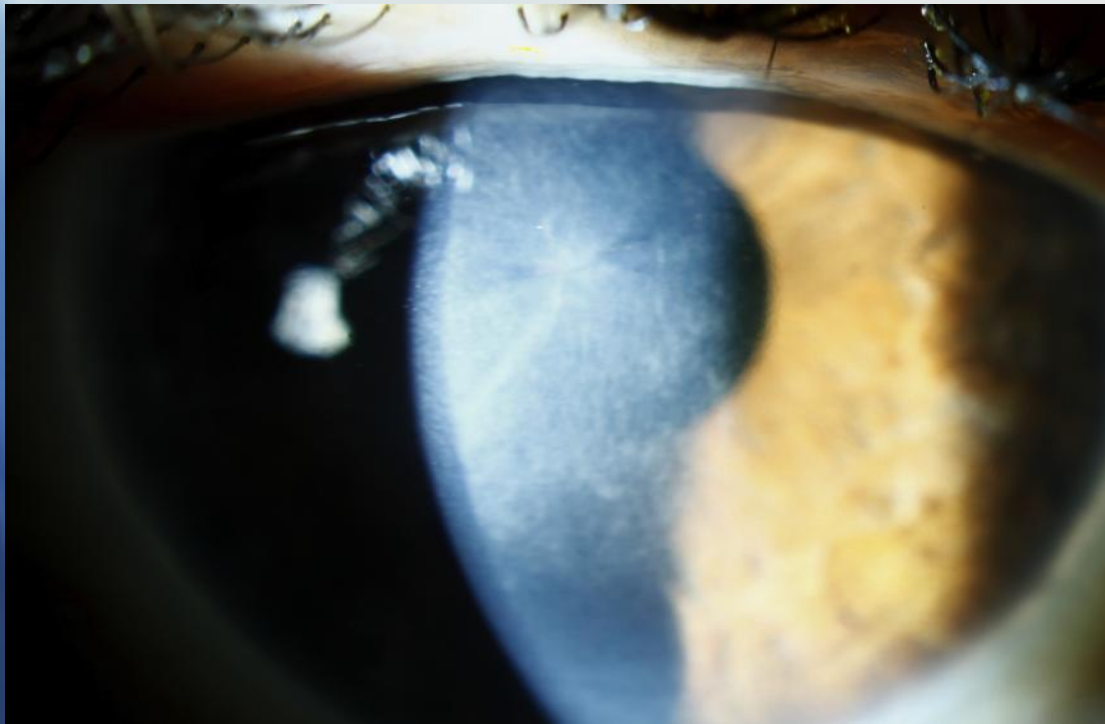
- Spontaneous reattachment of Descemet's membrane has infrequently been reported in the literature. Hayes et al. described a series of 12 patients - 4 partial and 8 complete detachments. Spontaneous reattachment occurred between 5 days and 7 months after surgery. 10 of 12 patients had a clear graft with successful spontaneous reattachment. The question of when to rebubble versus observe must be answered on a case by case basis.
- Graft detachment after DSEK surgery is known to be the most common complication of DSEK surgery, ranging from 1% to 82% depending on surgeon experience and technique used. Detachment rates are higher in complicated patients, such as those with glaucoma drainage devices and multiple prior ocular surgeries.
- Prognosis depends on area of Descemet's detached and spontaneous reattachment appears more common in partial Descemet detachments compared to full graft dislocations.

# Purpose

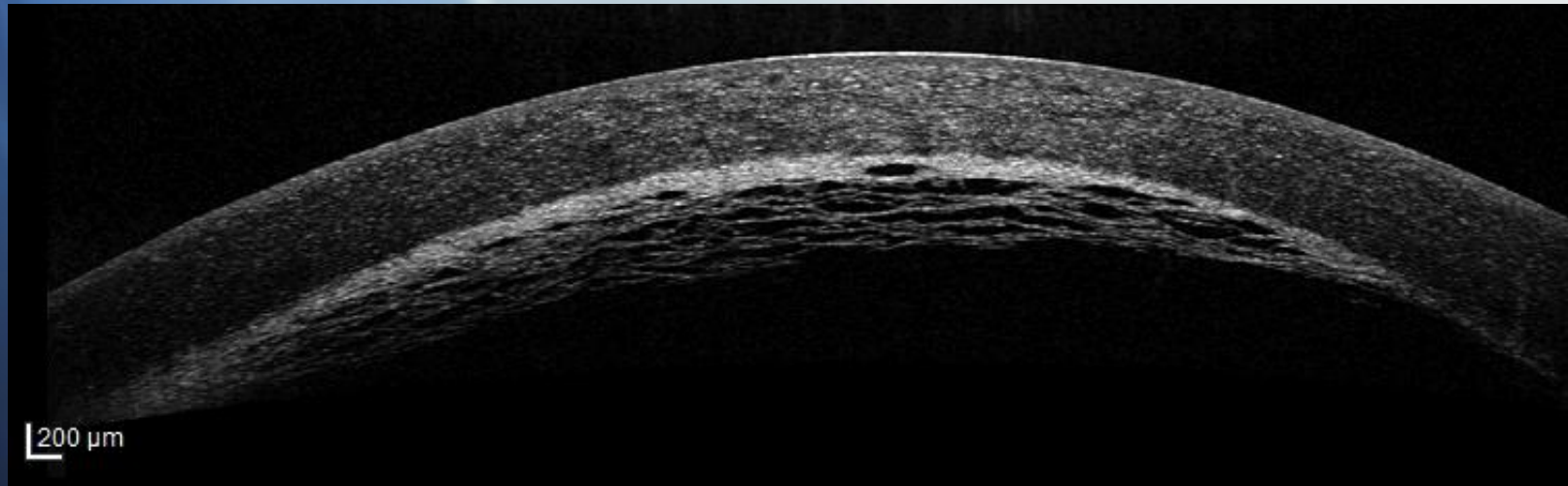
- The purpose of this paper is to describe two unique cases of spontaneous reattachment of Descemet's membrane.

# Methods: Case #1

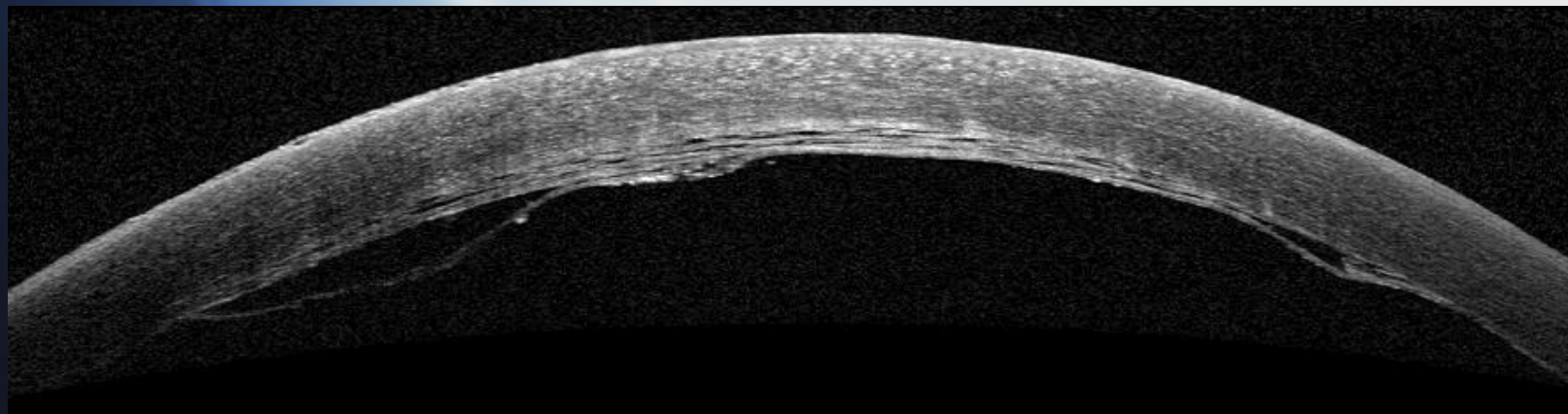
A 63 year old female with a history of CRVO and cystoid macular edema for which she received serial intravitreal kenalog injections. Following a steroid response to kenalog, she required placement of a Baerveldt glaucoma drainage device. After glaucoma surgery she developed hypotony. Healon was injected into the anterior chamber and inadvertently injected into the corneal stroma resulting in a Descemet's detachment.



# Case #1



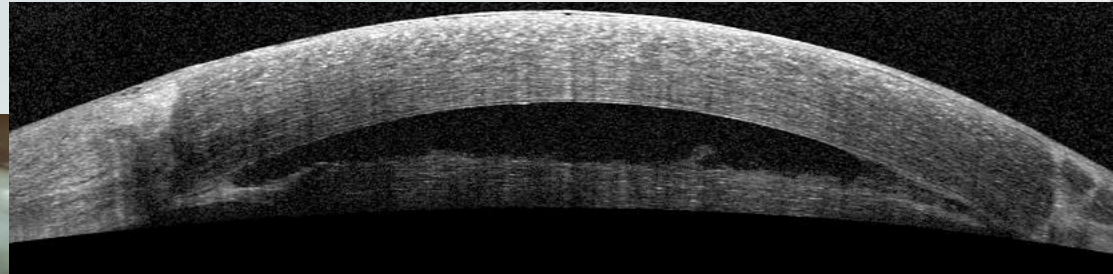
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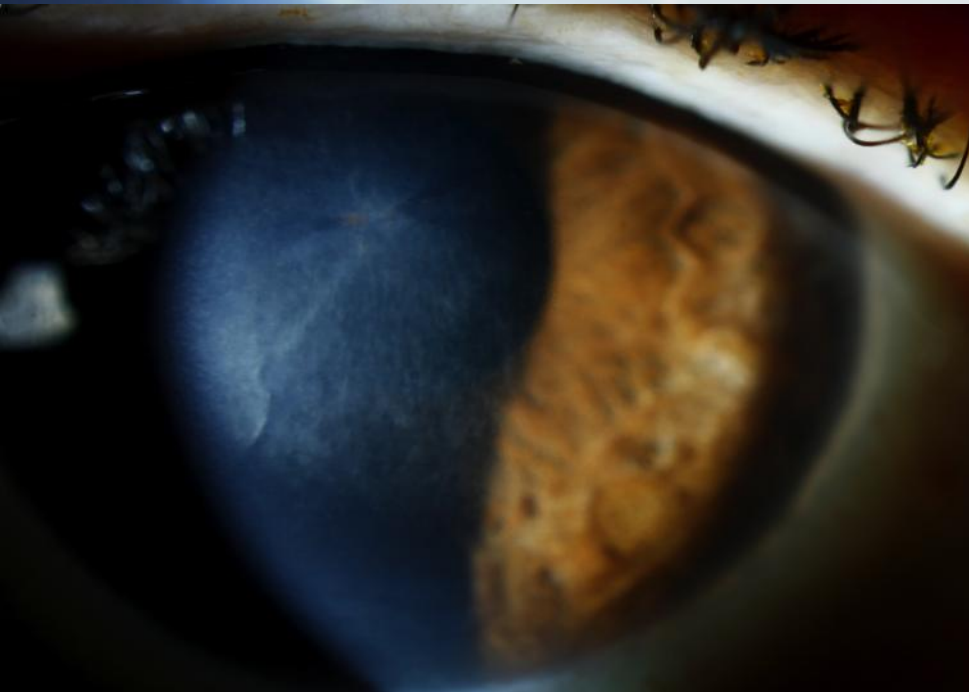
# Methods: Case #2

A 55 year old female who underwent DSEK surgery in her 4th penetrating keratoplasty for painful corneal edema in a failed graft. Post-operatively she had extensive interface fluid with near complete Descemet's detachment despite 2 attempts at rebubbling.

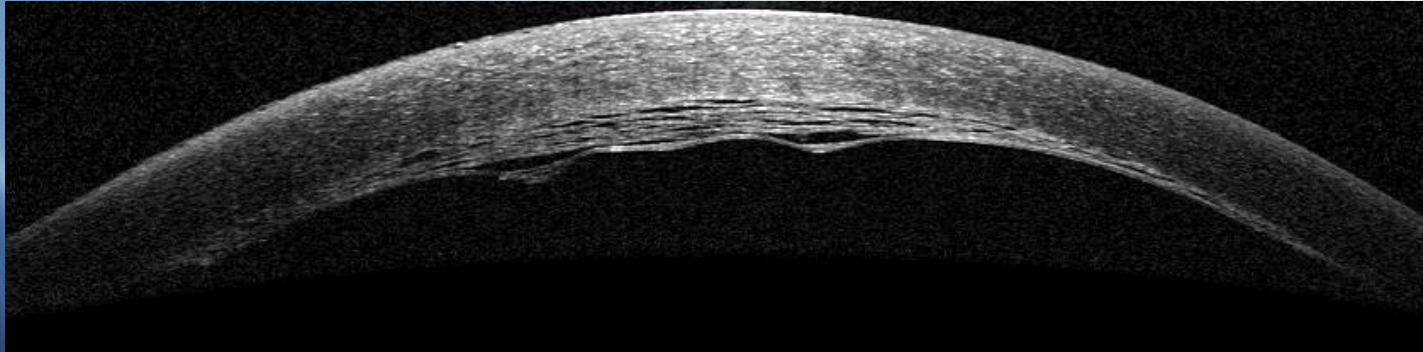


# Results: Case #1

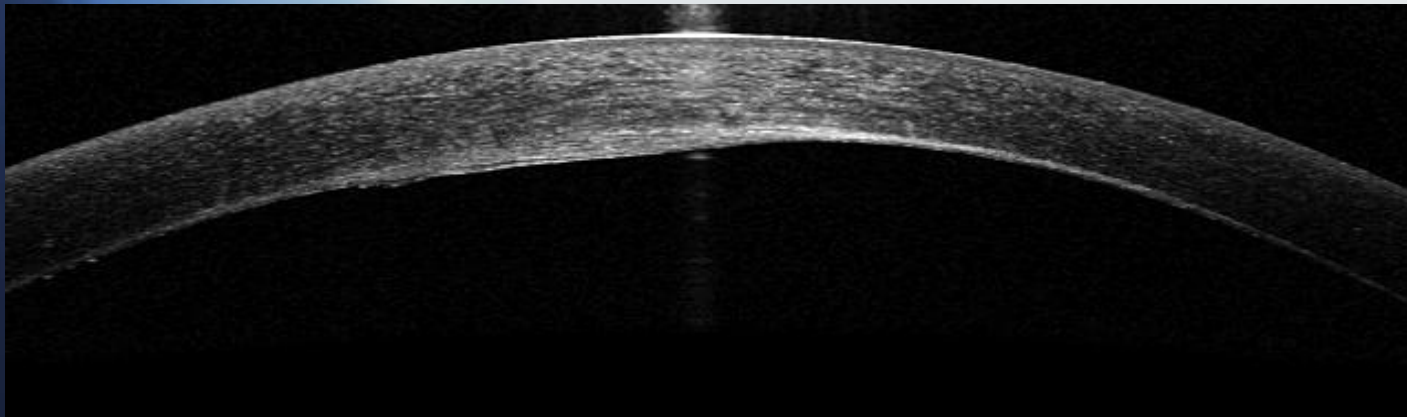
- The patient experienced spontaneous reattachment of Descemet's membrane over a two month period following the Healon administration into the corneal stroma. Her vision improved dramatically with mild residual stromal scarring and final visual acuity of 20/100.



# Results: Case #1



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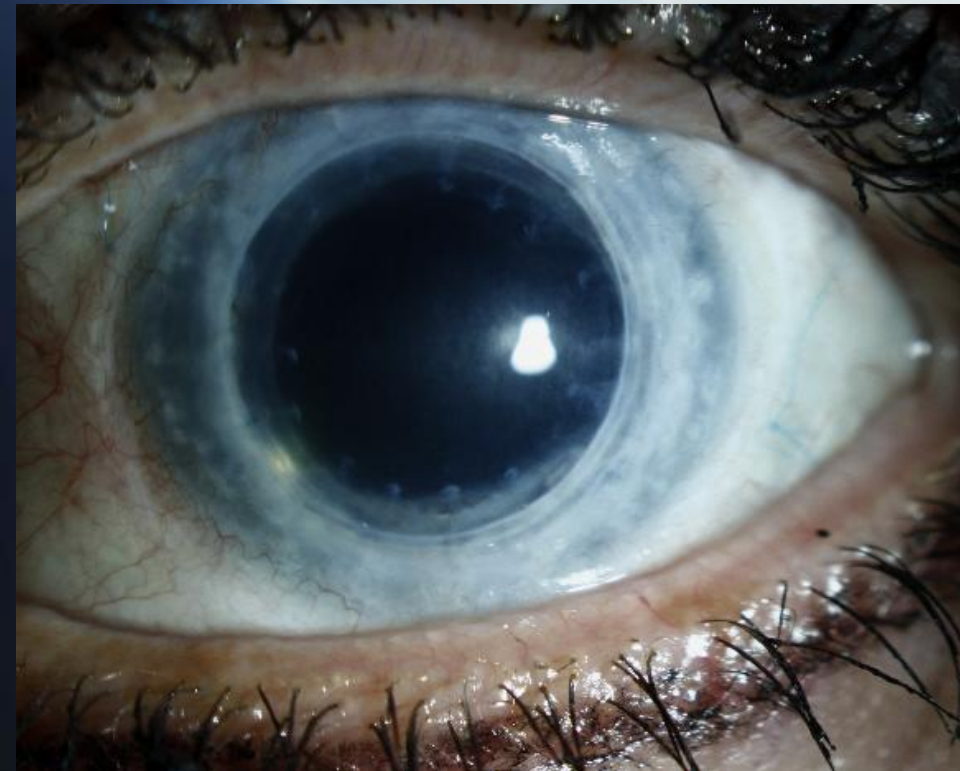


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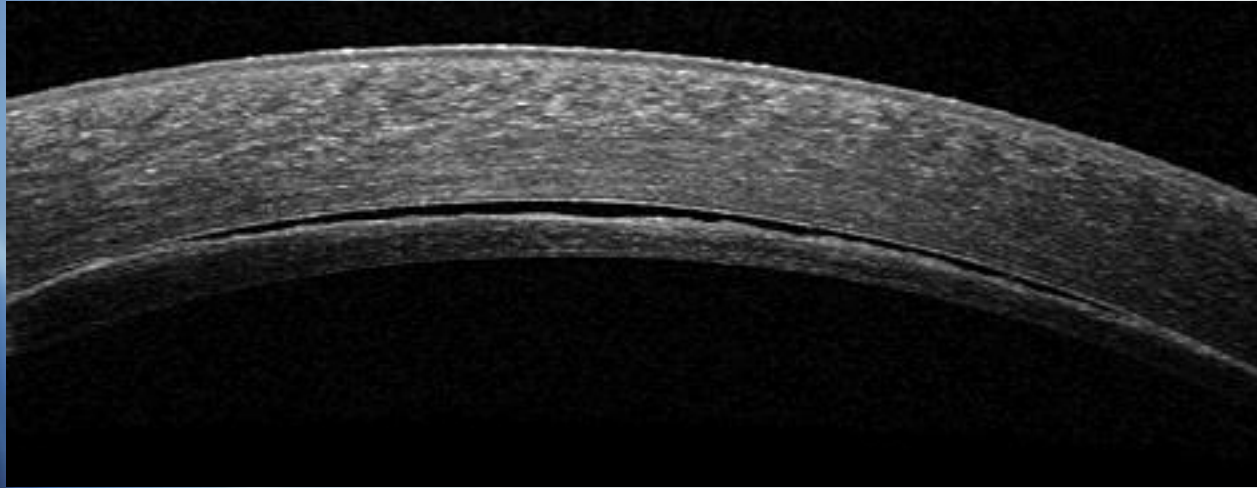


# Results: Case #2

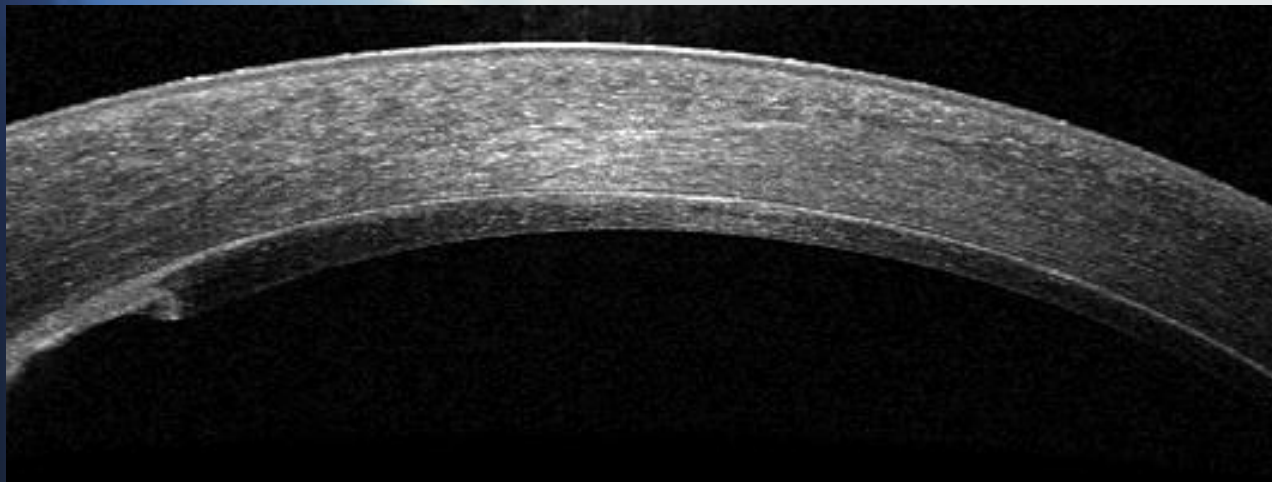
The patient experienced spontaneous reattachment over a 1 month post-operative period. She experienced complete resolution of her pain with bandage contact lens independence and improvement in visual acuity to 20/800 (visual potential limited by the retina).



# Results: Case #2



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# Conclusions

- Spontaneous reattachment of Descemet's membrane may occur weeks after surgery or after mechanical separation of Descemet's membrane from the corneal stroma and endothelium. This should be considered before pursuing aggressive surgical intervention or repeat surgical intervention, particularly in patients with a complicated past ocular history.
- The determination of when to rebubble versus to observe is facilitated by evaluation with anterior segment OCT.

# Abstract

**CONTROL ID: 3071**

**TITLE:** Two Cases of Spontaneous Reattachment of Descemet's Membrane

**AUTHORS (FIRST NAME, LAST NAME):**, Kendall E. Donaldson, Sarah R. Wellik

## **Purpose:**

The purpose of this paper is to describe two unique cases of spontaneous reattachment of Descemet's membrane.

## **Methods:**

**Case #1:** A 63 year old female with a history of CRVO and cystoid macular edema for which she received serial intravitreal kenalog injections. Following a steroid response to kenalog, she required placement of a Baerveldt glaucoma drainage device. After glaucoma surgery she developed hypotony. Healon was injected into the anterior chamber and inadvertently injected into the corneal stroma resulting in a Descemet's detachment.

**Case #2:** A 55 year old female who underwent DSEK surgery in her 4th penetrating keratoplasty for painful corneal edema in a failed graft. Post-operatively she had extensive interface fluid with near complete Descemet's detachment despite 2 attempts at rebubbling.

## **Results:**

**Case #1:** The patient experienced spontaneous reattachment of Descemet's membrane over a two month period following the Healon administration into the corneal stroma. Her vision improved dramatically with mild residual stromal scarring.

**Case #2:** The patient experienced spontaneous reattachment over a 1 month post-operative period. She experienced complete resolution of her pain with bandage contact lens independence and improvement in visual acuity.

## **Conclusion:**

Spontaneous reattachment of Descemet's membrane may occur weeks after surgery or after mechanical separation of Descemet's membrane from the corneal stroma and endothelium. This should be considered before pursuing aggressive surgical intervention or repeat surgical intervention, particularly in patients with a complicated past ocular history.

**KEYWORDS:** Central Corneal Thickness, Pachymetry, Specular Microscopy.

# References

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