

## Abstract 117

### THE CORNEA IN THE HANDS OF THE VITREORETINAL SURGEON

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#### **Introduction:**

Presentation of cataract extraction in a patient with corneal guttata without further reduction of endothelial cells.

#### **Materials and methods:**

The case presentation concerns a 77-year-old woman who was referred to our clinic for cataract treatment. Regarding the right eye, during the ophthalmological examination, the best corrected visual acuity (BCVA) was 0.5 LogMAR, there was a corneal guttata, nuclear sclerosis ++/+++, while the fundoscopy did not have any pathological findings. On the other hand, in the left eye, the BCVA was 0.5 LogMAR with corneal guttata and folds, PC-IOL, and without pathological findings from fundoscopy. An endothelial cell count examination was performed, according to which the cell density (CD) was 676 cells/mm<sup>2</sup> in the left eye and 715 cells/mm<sup>2</sup> in the right eye. The patient was fully informed about her disease but did not wish to undergo keratoplasty surgery. Thus, it was decided to perform cataract surgery on the right eye but without the use of phacoemulsification. The steps of the surgery were 3 port 25G pars plana vitrectomy, posterior vitreous detachment, phragmatome lensectomy behind the anterior capsule (a major effort was made to remain intact and to prevent endothelial cells from ultrasound damage), and placement of a 3-piece IOL in sulcus through a corneal incision. One month after the operation, endothelial cells were measured again and the CD was 709 cells/mm<sup>2</sup> in the right eye, it had not decreased at all. At the same time, the BCVA improved slightly to 0.4 LogMAR, without any postoperative complications.

#### **Results:**

After the operation there was no loss of endothelial cells, visual acuity improved and the patient was satisfied.

#### **Conclusions:**

In patients with endothelial dystrophy, it would be beneficial to remove the cataract with the use of phragmatome, so that no extra endothelial cells are lost, but also to avoid the complications of Extra-capsular Cataract Extraction.