

# 34<sup>th</sup> European Ophthalmology Congress

November 23-24, 2020 | Webinar

Faruk Semiz et al., Int J Ophthalmic Pathol 2020, Volume 09  
DOI: 10.37532/2324-8599-C2-015



**Faruk Semiz<sup>1</sup>, Anita Sylja Lokaj<sup>2</sup>, Njomëza Hima<sup>3</sup> and Olcay Semiz<sup>4</sup>**  
Eye Hospital Prishtina, Kosova

## Corneal lenticule implantation in keratoconus disease with relex smile surgery

**Purpose:** The aim of our study is to investigate the feasibility and effect of fresh lenticule implantation as allogenic graft that will be taken from myopic patients to implant in patients with keratoconus disease using VisuMax Femtosecond laser- Smile module surgery with primary objective to increase central corneal thickness and secondary to improve visual acuity and reduces K-values.

**Methods:** All the patients were clinically diagnosed with progressive keratoconus. Twenty patients underwent SMILE surgery (first group), and 20 patients underwent lenticule implantation (lenticule group). Visual acuity, corneal topography, anterior segment optical coherence tomography, were analyzed.

**Results:** Central corneal thickness were improved at the same day of surgery and vision started to improve at first week postoperatively in the lenticule implant group. Corneal topography showed a statistically significant decrease in the anterior K1 and K2. All the grafts from both groups were clearly visible by anterior segment optical coherence tomography observation. The central corneal thickness was stable during the 6-month study period. No complications were observed during short term follow-up.

**Conclusion:** In conclusion, the present study may suggest that this procedure using fresh lenticule with stromal stem cells and live keratocytes is safely, reliably, and effectively increase corneal thickness and improves visual acuity with no adverse effects, which may provide new avenues in the treatment of cornea ectasia.

**Key Words:** keratoconus, small incision, fresh lenticule, stromal implantation, stromal stem cells, Smile surgery

# 34<sup>th</sup> European Ophthalmology Congress

November 23-24, 2020 | Webinar

## Biography

Faruk Semiz was born in 1957 in Turkey. He finished primary and secondary school in Carsamba, Turkey. In 1994 he graduated from Gazi University with a degree in medicine. He did the specialization in 2000 at the Ankara Hospital Numune Hastanesi Clinic for Eyes. From 2000-2003 he worked at the State Hospital in Sakarja, Sy Per Clinic. Then until 2010 he worked at Inci Goz Hospital in Sakarja. In 2011-2015 he worked in Macedonia at the European Eye Hospital. Since July 2015, he has been working as a doctor and operator at Eye Hospital Prishtina. Faruk Semiz has Experiences and employment (operations) such as Cataract Surgery Fako + iol, Strabismus Operations, Vitreo Retinal Operations, Relex Smile, Glaucoma Operations, Eyelid Surgery, DCR Multidiod Laser Operations, Laser Tear Operations, Keratokonus, Dry Eye, Anterior Segment Surgery.