

## CENTRAL CORNEAL THICKNESS MEASURED BY THE OCULYZER, BIOGRAPH, AND ULTRASOUND PACHYMETRY

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Central corneal thickness (CCT) is an important parameter in selecting patients before any corneal refractive procedures and in postoperative follow-up, in monitoring the patients with corneal disorders such as keratoconus and Fuchs' dystrophy, as well as in adjusting the intraocular pressure according to central corneal thickness.

The aim of the paper was to compare the results of CCT measurements obtained by different measurement instruments: Oculyzer, BioGraph and ultrasound pachymetry.

CCT was measured in 64 eyes of 32 patients. The measurements were performed in a specialized Eye Hospital "Maja Clinic" in Niš, using the following instruments: WaveLight Allegro Oculyzer, WaveLight Allergo Biograph, ultrasound pachymeter DGH Pachette 3. The mean values of central corneal thickness obtained from different devices were compared.

The mean values of CCT ( $\pm$  standard deviation) obtained with Oculyzer were  $552.94 \mu\text{m} \pm 22.88 \mu\text{m}$ ,  $556.56 \pm 25.32 \mu\text{m}$  obtained with BioGraph, and  $559.46 \pm 26.0 \mu\text{m}$  measured by ultrasound pachymeter. There were no statistically significant differences among different measurement devices.

The CCT measurements with the Oculyzer, BioGraph, and ultrasound pachymetry do not show statistically significant differences, so the results of CCT measurements obtained by using any of these devices may be considered valid.

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**Key words:** corneal thickness, pachymetry, measurement devices