Comparative Evaluation Of Keratoconus Eyes With Pentacam Topography

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Purpose. To study Pentacam topography evaluation of keratoconic eyes, with values in the anterior segment and comparison of normal eyes.

Methods. The Pentacam measurement of 78 keratoconic eyes were evaluated and were compared with emetropia, ametropia and post excimer laser eyes. The anterior and posterior keratometry, topographic astigmatism, axis, aspherisity and central corneal thickness, corneal and anterior chamber volume and anterior chamber depth of all cases were evaluated with Pentacam.

Results. Anterior and posterior keratometric values were different in keratoconus eyes (p < 0.001). Anterior and posterior topographic astigmatism were same with mix astigmatic group (p=1.0 ve p=0.706). However anterior aspherity were similar with hyperopic excimer laser group (p=1.0), posterior aspherity were different with all groups (p < 0.001). Central corneal thickness were similar with myopic excimer laser group (p=1.0). There were less differences in anterior chamber volume and anterior chamber depth values between groups.

Conclusion. When considering all groups together, anterior and posterior keratometry and posterior aspherisity parameters showed statistical differences between groups. Study shows importance of posterior keratometry and posterior aspherisity beside anterior keratometry in topographic evaluation of keratoconus.

Biography
Dr Faik Oruçoglu (Orucov) has completed his cornea and refractive surgery fellowship from Hadassah University Hospital , Jerusalem , Israel . He is head of refractive surgery team at Kudret eye Hospital in Istanbul , Turkey . He has conducted over one hundred researches and studies on laser eye surgery and cornea, which have been presented at International Meetings all over the World. He is also a board member of TCOD (Ophthalmology Society of Turkish Speaking Countries) and chief of TCOD-Young Ophthalmologists.