

Treatment of Irregular Astigmatism with the CustomVis Solid State Laser

John Vukich, MD, Ian Anderson, MD, Marguerite McDonald, MD.

Purpose: To describe the outcomes of the first cases treated for irregular astigmatism with the CustomVis solid-state laser.

Methods: Three cases, two with post PK and one with post PRK irregular corneas were treated with the CustomVis system.

Results: Patient 1 s/p PK demonstrated an improvement of BSCVA from 20/30 to 20/20, a 7 line improvement in UCVA and a >3D decrease in K cylinder. Patient 2 s/p PRK and CRI's also had a BSCVA improvement from 20/30 to 20/20, a 4 line improvement in UCVA and a > 3D decreased in K cylinder. Patient 3 s/p PK demonstrated 6 line improvement in UCVA a 12D refractive change in one meridian, 5.25D refractive change in the opposite meridian, and an 8D decrease in K cylinder associated with no loss of BSCVA (20/40).

Conclusion: The first three cases with highly irregular corneas treated with the CustomVis laser demonstrated dramatic improvement in visual and refractive outcome.