

Keraring - Keratoconus Case Study

This case study looks at the right eye of a contact lens intolerant 23-year-old female with inferior keratoconus, a subjective refraction of -1.00DS -2.50DC x 70° and a best corrected visual acuity of 6/9 (uncorrected 6/18). The Sagittal Curvature (Front) Scheimpflug corneal topography (highlighted in figure 1) demonstrates the extent of the keratoconus and its position.

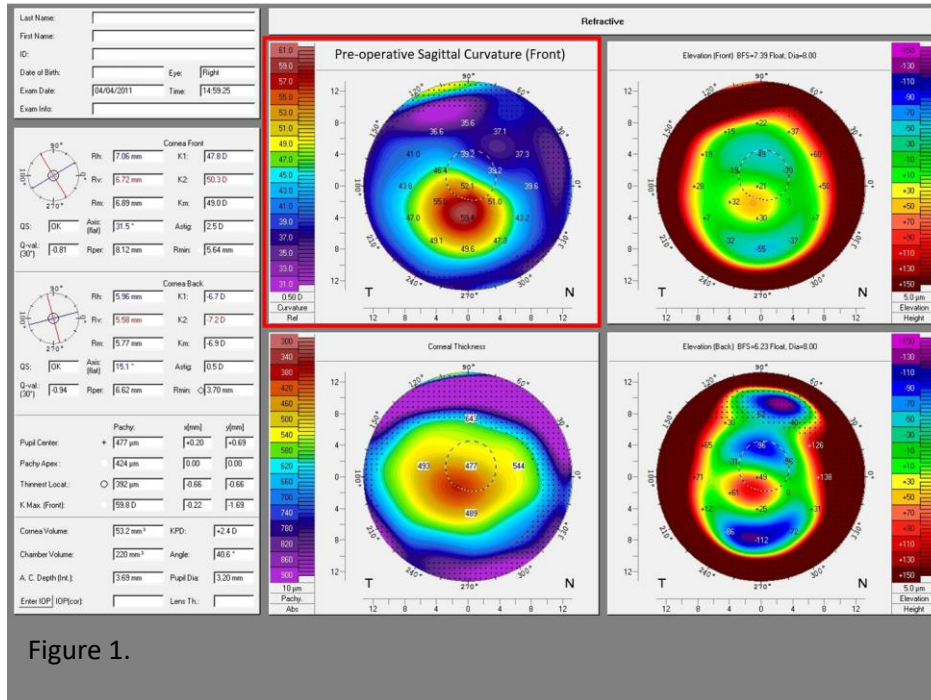


Figure 1.

A single Keraring intrastromal corneal ring segment of 6 mm diameter, 150° arc length and 250 microns thickness was implanted at 80% depth of the cornea in accordance with the appropriate nomogram, as highlighted in figure 2.

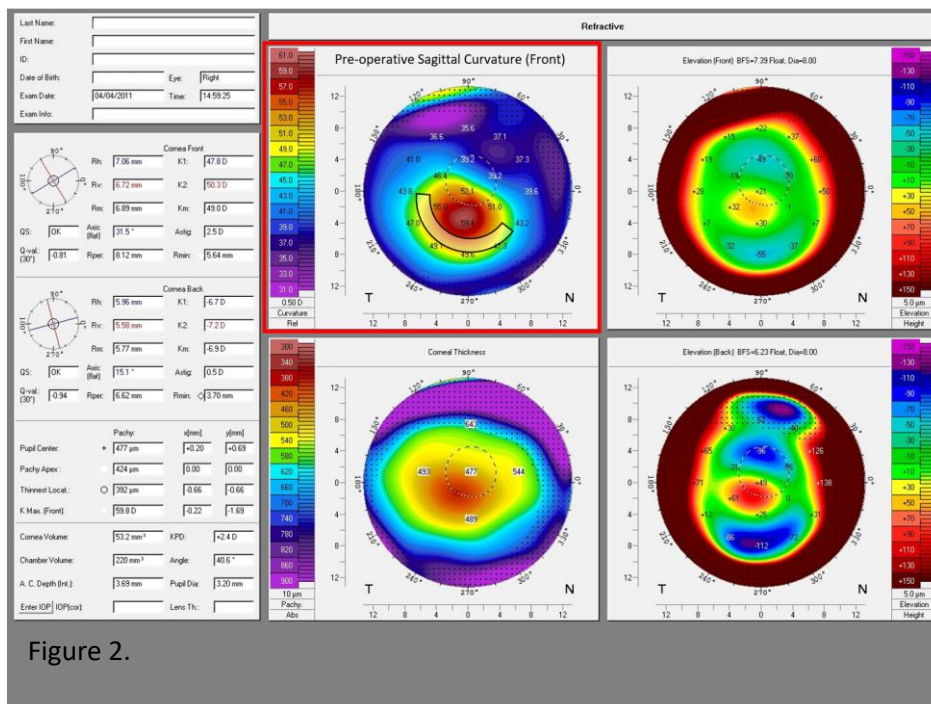


Figure 2.

The 4-month post-operative corrective effect of the ring can be seen highlighted in figure 3. The cone was flattened by 7.5 D and the resulting regularization of the cornea lead to an improvement in uncorrected visual acuity from 6/18 pre-operatively to 6/7.5 after the implantation of the ring segment.

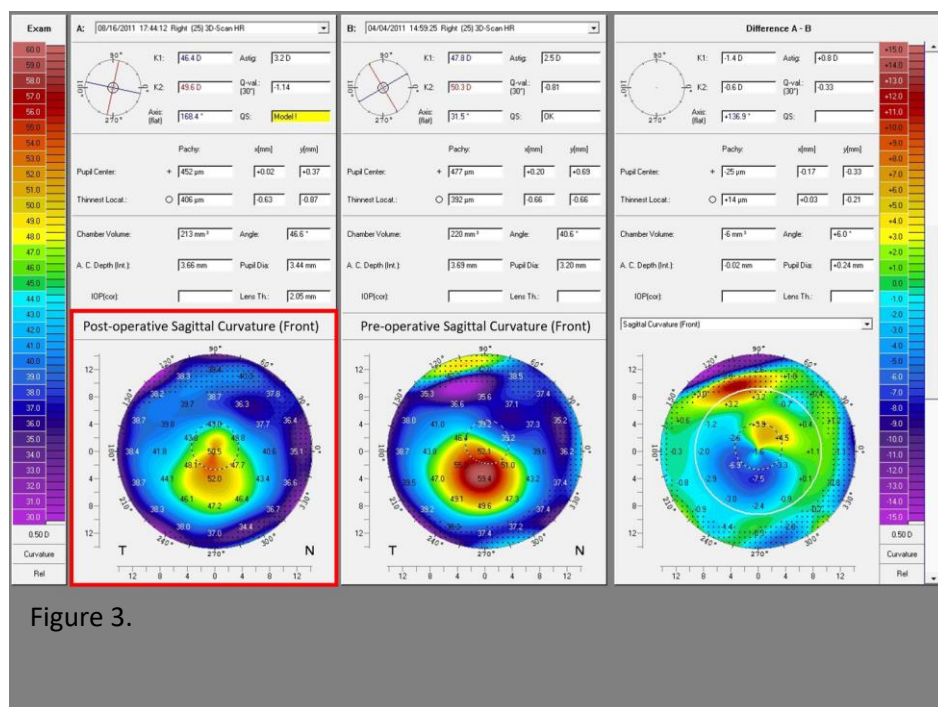


Figure 3.