
Young age < 25 ys -----> be
more **aggressive**

Early Keratoconus: Epi-off CXL →
stabilization and follow up

Moderate and severe Keratoconus:
CXL → stabilization + Rings →
Regularization and Flattening

Advanced opacified cornea :
Keratoplasty

Middle age > 25 ys -----> be less aggressive

Early Keratoconus: Epi-on CXL or follow up

Moderate and severe Keratoconus:
Rings → Regularization and Flattening with follow up **if progression** → Stabilization by CXL

Advanced opacified cornea :
Keratoplasty

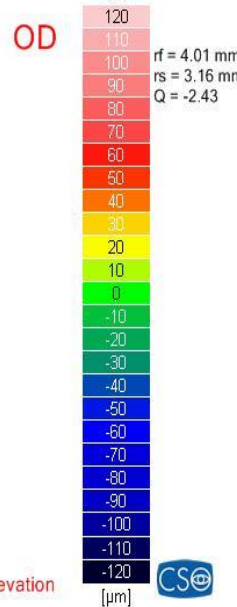
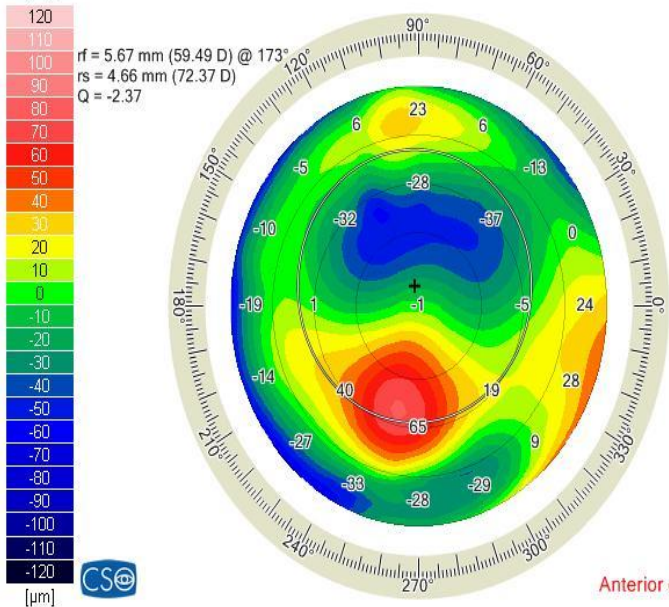
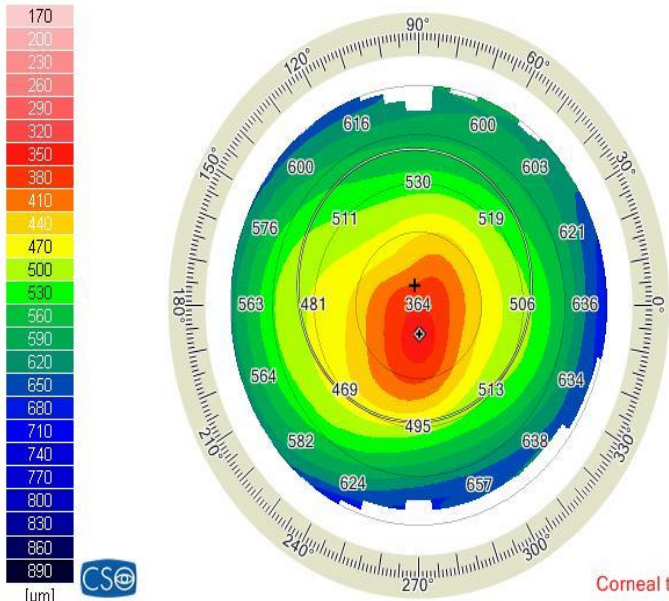
Rings in advanced cases



Aim:

- To delay corneal grafting.
- To make the eye refractable.
- To decrease coma aberrations.

N.B: Keratoplasty is still an option



Mohamed Hassan, Kamal - OD

Birthdate: 01/10/1998
 Identification code: 81521
 Exam date and time: 02/08/2015 5:13 AM
 Acquisition date: 02/08/2015 05:15:45 [1-2]

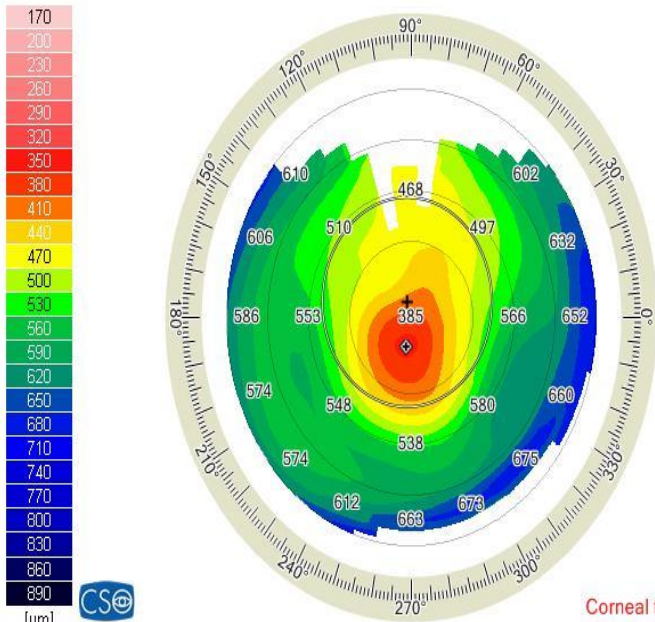
Acquisition quality

Summary Indices

Horizontal Visible Iris Diameter
 HVID = 11.64 mm
 + Pupil (Topographic)
 $x = -0.10 \text{ mm, } y = 0.41 \text{ mm}$
 $\varnothing = 5.59 \text{ mm}$
 ♦ Thinnest location
 $x = 0.03 \text{ mm, } y = -0.60 \text{ mm}$
 Thk = 346 μm
 ♦ Apex
 $x = 0.16 \text{ mm, } y = -0.58 \text{ mm}$
 Thk = 349 μm Curv = 72.63 D
 Anterior chamber
 CCT + AD = 0.364 + 3.48 = 3.84 mm
 Volume = 186 mm³
 Iridocorneal angle = 46°
 HACD = 12.32 mm
 Corneal volume ($\varnothing = 10 \text{ mm}$)
 Volume = 51.7 mm³

K readings (Front)

Sim-K
 $n0 = 1, n1 = 1.3375$
 Sim-K
 K1 = 53.11 D @ 172°
 K2 = 60.62 D @ 82°
 Avg = 56.62 D
 Cyl = -7.51 D Ax 172°



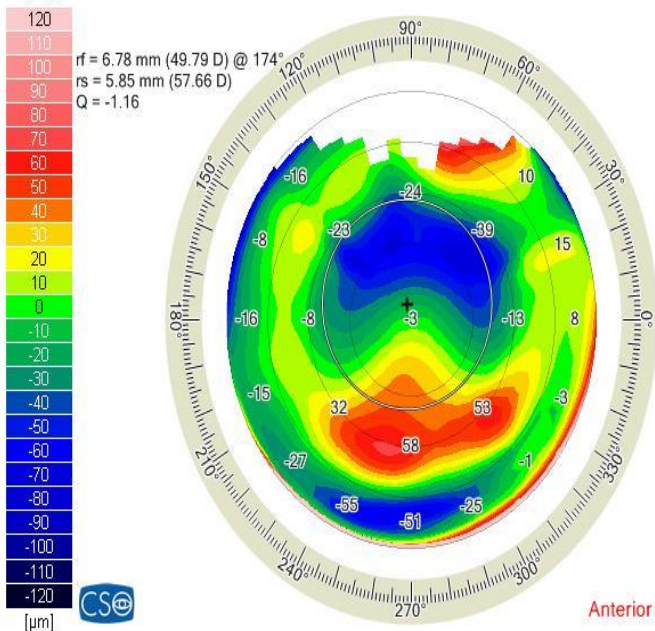
Corneal thickness

OD



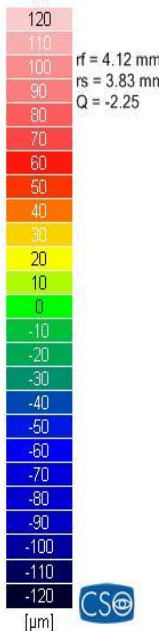
Tangential anterior

OD



Anterior elevation

OD



Posterior elevation

OD

Mohamed Hassan, Kamal - OD

Birthdate: 01/10/1998
 Identification code: 81521
 Exam date and time: 31/08/2015 2:13 AM
 Acquisition date: 31/08/2015 02:14:18 [1-2]

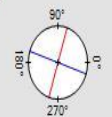
Acquisition quality

Summary Indices

Horizontal Visible Iris Diameter
 HVID = 11.69 mm
 + Pupil (Topographic)
 x = -0.11 mm, y = 0.31 mm
 Ø = 4.13 mm
 ♦ Thinnest location
 x = -0.12 mm, y = -0.59 mm
 Thk = 357 μm
 Ⓢ Apex
 x = 2.03 mm, y = -1.93 mm
 Thk = 609 μm Curv = 78.36 D
 Anterior chamber
 CCT + AD = 0.385 + 3.64 = 4.03 mm
 Volume = 165 mm³
 Iridocorneal angle = 47°
 HACD = 12.22 mm
 Corneal volume (Ø = 10 mm)
 Volume = 53.8 mm³

K readings (Front)

Sim-K
 n0 = 1, n1 = 1.3375
 Sim-K
 K1 = 46.66 D @ 162°
 K2 = 52.78 D @ 72°
 Avg = 49.53 D
 Cyl = -6.12 D Ax 162°



Home message

- Many guidelines affect our decision in keratoconus management.
 - Pentacam is an important tool in evaluation of Keratoconus patient.
 - Age is a guiding factor in treatment with aggressive attitude in young age.
 - Customization should be done for every patient in keratoconus management.
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Thank you

