INTRASTROMAL RINGS

Before you start:

1. Verify patient name, age, ametropia to correct, and calculate the equivalent spherical if INTACS it is programmed, in case of Corneal Ring verify Internet sheet or data Pentacam transcription.

2. In case of INTACS verify nomogram:

Spherical Equivalent	Thickness	Type
-1.50	250	ICI
-2.00	300	ICI
-3.00	350	ICI
-4.00	400	ICI
-5.00 dp	450	ICI
5.00 – 7.00 dp	400	ISK
> 7.00 dp	450	ISK

Table 1. Intacs nomogram. Always in queratometrías under 50 diopters. If greater than 50 diopters using ISK (400 if the equivalent is less than -5.00 diopters , 450 if greater).

3. Check on pachymetric map steep axis and less pachymetry than 5 mm (CornealRing) and 6 mm INTACS.

4. To CornealRing, leaf patient brings number of segments, length in thickness and degrees, verify existence of it and remember when they are not equal segments, in the same eye should be placed in the thickest side affected by keratoconus, and the thickness of the segment may not be greater than half of the lower pachymetry to 5mm.

With patient:

1. Tegaderm or micropore Placement in PS
2. Placement blefaróstato Castroviejo o Lieberman.
3. Location surgeon to 90 ° microscope.
4. Dialling clock Mendez and Sinskey steep axis of corneal or axis of incision.
5. Relocation surgeon and microscope, according to steep axis and dominant hand.
6. For Corneal Ring and INTACS ISK demarcation and visual axis with Sinskey.
7. Demarcation of optical zone with marker for INTACS or Vejarano marker for Corneal Ring according to shaft incision and visual axis, the optical zone of INTACS ICI is according to shaft of incision and pupillary axis with marker for INTACS ICI. Verify optical zone marking and dissection area.
8. In case of 220º rings, relocation of new surgeon and microscope according to the site of incision (20 -30 ° further from the steep axis) which is already marked with marker Vejarano.

9. Calibration diamond knife to 0 microns, check the tip. Then take the measured and calculated depth recheck the tip.
10. Freeze the eye with clamp 12 or Kremer at 180⁰ shaft incision, take limbal conjunctiva.
11. Make an incision penetrating steep axis with diamond knife.
12. Predelaminación: With predelaminador insert the perpendicular tip for incision, once you get to the bottom horizontal, predelamine in perpendicular form the cornea in a single plane, placing 12 or Kramer at 45 ° from the direction of predelaminación. Then check the predelaminación at 180 ° in site of incision without bumps.
13. Creation of "bolsillo con espátulas". Insert the spatula in perpendicular incision and then move the spatula in horizontally, taking fixation in "conjuntiva limbar" at 45 ° of the direction of dissection. (In case a segment, only one pocket).
14. Pass again the "predelaminador", verifying the dissection at 180⁰ and absence of ridges.
15. Place the suction ring centered visual or pupillary axis according to the case, the tube that introduce the air must be to the left, the incision should be in the middle of the two pillars of the suction ring. The scrub nurse placed the dissector rotating while checking an adequate excursion on dissection area, once verified, absorb, starting at 40, then verify that the dissector pass on dissection demarcated area.
16. If you release the suction ring, remove the ring, flush with saline and proximetacaine and reposition the ring, when evidence of scleral groove disappears left by the first suction. Increase the suction to 50 cm.
17. Place a knife in a pocket, the scrub nurse placed dissector, INTACS or Vejarano, as applicable.With the dissector tip beneath the spatula and in the same direction. Immobilize left hand and bring the knife to the wound the visual axis with the right hand. Never deepen the spatula, move the eye and release the suction.
18. Remove spatula softly, making dissection.
19. Repeat steps 15 and 16 to create another segment insertion channel in case of introducing two segments.
20. With modified MacPherson, take the segment, verifying lower base and apex. In case of INTACS the point of entry to the channel has not a mark of CornealRing, just check base and apex.
21. Insert segment (s) and verify that it is (n) at least 20 ° from the insertion site.
22. With "Sinskey" accommodate the body of the segments.
23. Suture with nylon 10-0 and contact lens, preview infiltration of proxilaxis.