Iris-fixate (prepupillar) IOL implantation for the management of spontaneous late in-the-bag IOL dislocation

In recent years, implantation of and iris claw IOL (ICIOL) has proved to be a successful method for the correction of aphakia in the absence of capsular support.

**Artisan Aphakia 205Y**

- Single-piece polymethyl metacrylate with clip haptics that attach to the iris on both sides of the optic.
- It avoids the iridocorneal angle.
- Surgical time is shorter, the intraocular manipulation is simple and less traumatic. (as compared with sclera/iris sutured IOL)

**Iris claw IOL indications for spontaneous late in-the-bag IOL dislocation**

- **grade III**
  - Damaged IOL
  - Excessive cortical material
  - Plate-haptic with no CTR
  - no holes.
  - Capsular phimosis.
  - Repositioning difficulty
- **grade IV**
Contraindications
- Altered iris tissue & structure
- Recurrent or chronic iritis
- Acute inflammation
- Corneal dystrophy

Advantages I
- Iris Bridge support, prevents endothelium touch
- Stable "claw fixation"
- Unrestricted dilatation and constriction
- Excellent centration

Advantages II
- One size fits all.
- No interference with vascular iris physiology
- Optimal postoperative visibility of the lens
- No iris atrophy when recommended surgical technique is used

Disadvantages
- Requires altered iris tissue & structure
- Requires surgical skill, but has a shorter learning curve
- Requires incision 5.5mm
**Surgical Technique. Artisan instruments**

- Implantation forceps
- Enclavation forceps and needle
- Lens manipulador
- VacuFix set
  - 2 hanpieces: purple (right side)
  - orange (left side)
- Irrigation plug to block irrigation line

**Surgical Technique: For iris fixation we can use:**

- Enclavation forceps
- Enclavation needle
- VacuFix vacuum enclavation system

**Surgical Technique: VacuFix**

- Vacuum enclavation system.
- Creates a perfect iris bridge.
- Fixed and reproducible amount of tissue.
- Compatible with all phaco machines:
  - Peristaltic pump  280mmHg
    - 40cc per min
  - Venturi pump  200mmHg

**Surgical Technique: Implantation**
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- Peribulbar anaesthesia
- Superior 5.5mm corneal main incision
- 2 paracenteses 1.3mm, 2 and 10 o’clock.
- Acetylcholine 1%
- Ophthalmic viscosurgical device (OVD).
- Artisan IOL
  - inserted vertical position
  - rotated with hook
  - centred on the pupil

**Enclavation VacuFix**

- Block the irrigation tube with plug
- Conect the apropriate VacuFix handpiece to the aspiration tube.
- VacuFix inti the eye by paracenteses
- Place the hole of VacuFix on the iris surface, underneath the clip of the haptic.
- The tip stays in contact to the iris untill maximun vacuum
- Depressing the footpedal

**Iridectomy**

- Removed OVD
- Sutured main incision

**Check amount of iris tissue, centration and positioning of the lens**
Postoperative complications lens related:

- Pupil ovalization.
- Lens tilting.
- Subluxation.
- Iris capture.

Conclusions.

- Iris claw implantation seems a promising surgical alternative and a excellent option for patients with in-the-bag dislocation in which a decision is made for exchange the IOL.
- Satisfactory results were achieve with low rate of complications.

Thank you