

SURGICAL PROCEDURE FOR ARTISAN PHAKIC IOL IMPLANTATION

1. Prior to implantation, carefully examine all packaging to verify that the correct lens power has been chosen, the expiration date is respected and the contents have not been damaged. Using a sterile technique, open the blister pack and deliver the lens tray with the lens to the sterile prep tray.
2. Make a main incision of 5.2 or 6.2 mm, depending on the optic diameter of the lens. The incision should be at 90° from the intended enclavation axis.
3. Inject a miotic agent into the anterior chamber to constrict the pupil. The pupil has to be constricted to facilitate enclavation in the mid-periphery of the iris and to protect the natural lens during the procedure.
4. Inject a sufficient amount of viscoelastic to maintain anterior chamber depth, but do not overfill. The technique for injecting viscoelastic for this procedure differs from the one for cataract surgery. The viscoelastic must be injected slowly from the periphery toward the pupil, but never directly into the pupillary area. Only use high-viscosity sodium hyaluronate viscoelastic.
5. Make a 1.2 mm paracentesis on either side of the main incision site. The paracenteses must be approximately 9.0 mm apart, oriented towards the enclavation sites, and pointing slightly downwards. Test whether the enclavation needle can properly enter the paracenteses.
6. The IOL can become electrostatically charged and stick to the lid of the lens tray. Carefully tap on the lid before opening the lens tray. Open the lens tray and examine the IOL carefully for damage or debris.
7. The IOL may be rinsed with a sterile balanced salt solution to remove the electrostatic charge and coated with a viscoelastic prior to implantation to facilitate easy passing through the main incision.
8. Introduce the lens into the anterior chamber through the main incision in a vertical orientation using implantation forceps or Artifix holding forceps. Retract the forceps. Avoid contact of the forceps with the crystalline lens or the corneal endothelium.
9. Add a small amount of viscoelastic on top of the IOL to prevent corneal touch.
10. Rotate the IOL 90°, and align it with the enclavation axis using the lens manipulator. Centre the lens over the pupil.

Regarding Artisan Toric phakic IOL implantation:

Mark the implantation axis prior to surgery. Perform the marking with the patient sitting upright and fixing the gaze on a distant object to avoid rotation of the globe. Mark the implantation axis very accurately, as a deviation may result in an over- or undercorrection. Proper lens alignment into the desired axis is crucial for an optimal postoperative outcome. Off-axis fixation can cause a compromised refractive outcome or other visual disturbances. For the proper placement of the Artisan Toric phakic IOL in the eye and to avoid placement errors, Ophtec can provide the physician with an illustration of the situation in situ together with the lens power calculation.

11. Bring the appropriate implantation forceps through the main incision, securely grasp the IOL at the edge of the optic, and choose a side of the lens to enclavate.
12. Insert the enclavation needle through one of the paracenteses. Perform the first enclavation with the non-dominant hand. Hold the optic securely with the implantation or holding forceps and use the enclavation needle to create a small knuckle of mid-peripheral iris tissue that is virtually immobile. Make a snow ploughing movement at the desired enclavation site. Gently lift the iris tissue through the slot at the inferior claw of the haptic. Sufficient iris tissue must be placed through the haptic slot to ensure adequate lens stability. As a rule of thumb, an iris bridge or knuckle with a width approximately the same as the widest part of a haptic claw should be enclavated.

If the enclavation forceps are used, take up a fold of iris tissue below the claw slot, while securely holding the optic. Press down the IOL over the iris fold with the implantation forceps while holding the enclavation forceps at the original level.

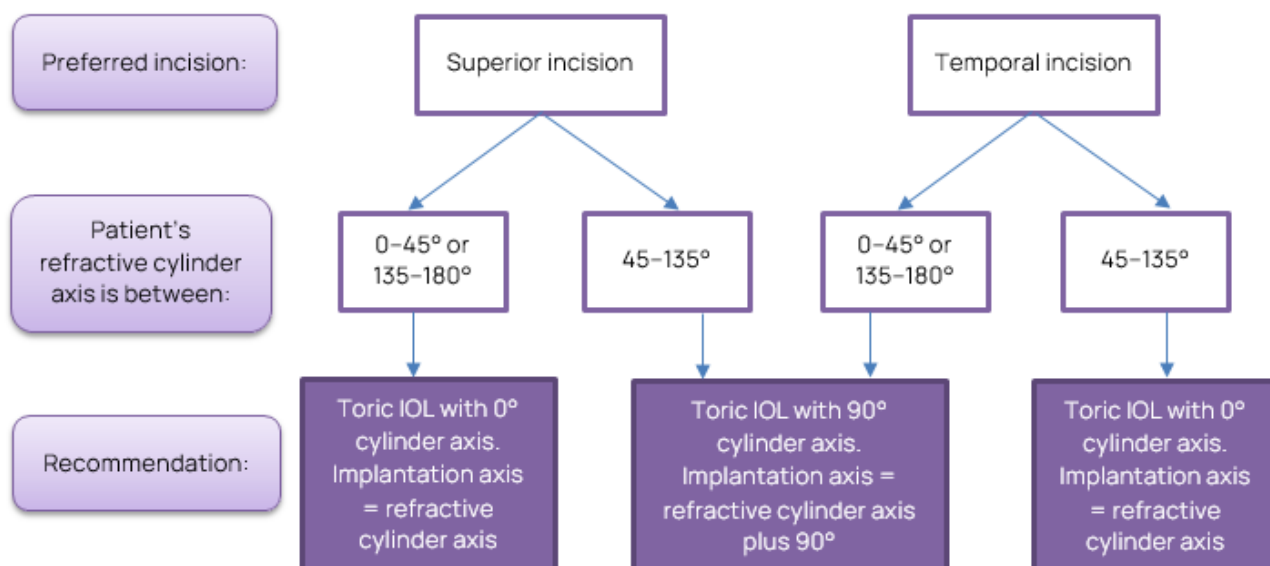
The enclavation procedure may also be performed using the VacuFix enclavation system; procedure as described in the instructions for use of the VacuFix.

13. Repeat step 12 on the other side of the IOL. Make sure the IOL is well centred over the pupil and that the haptics are in a horizontal plane after the IOL's enclavation. Furthermore, verify the amount of enclavated iris tissue.
14. Perform an iridotomy or iridectomy outside the periphery of the IOL, preferably in the part of the iris that the upper eyelid will cover. A single small iridotomy is preferred to prevent light related complaints. The iridotomy is sufficient in size as soon as a red light reflex can be observed.

Alternatively, iridotomy may be performed at least one week prior to the IOL implantation using a neodymium-doped yttrium aluminium garnet (Nd:YAG) laser.
15. Remove all viscoelastic from the eye by flushing with saline using a syringe with cannula. Make a semi-circular movement during flushing from opposite the main incision. Also, flush out viscoelastic from underneath the IOL. Make sure no viscoelastic remains in the eye as this may cause high intraocular pressure postoperatively.
16. Close the main incision by stromal hydration to prevent wound leakage. Watertight wound closure is of paramount importance to prevent a shallow anterior chamber in the immediate postoperative period. When sutures are made, do not suture too tight to avoid surgically induced astigmatism. Corneal sphericity can be checked with a Placido disk under the microscope, and adjustments to sutures can be made if necessary.
17. Administer and prescribe postoperative medication (e.g. antibiotics and corticosteroids).
18. Place a protective patch over the eye after surgery.
19. Patients must be instructed not to rub the eye to avoid physical impact or direct pressure to the eye, and to avoid activities that increase the risk of ocular trauma (e.g. certain ball or martial arts sports) or to wear safety glasses during such activities.
20. Patients must be informed that, besides a postoperative follow-up after six months, yearly examinations are required to assess the long-term safety of the IOL. Those examinations must include intraocular pressure, endothelial cell counts and anterior chamber measurements.

The physician must ensure traceability of the IOL and provide the patient with a patient implant card.

Artisan Toric phakic IOLs: recommendation for choice of lens model



SURGICAL PROCEDURE FOR RE-ENCLAVATION

Re-enclavation may be required in case of decentration or (partial) luxation. Warning: do not re-enclavate when the IOL haptics appear damaged.

1. Make a 2.0 mm main incision at 90° from the intended enclavation axis.
2. Follow steps 3 and 4 of the surgical procedure for Artisan phakic IOL implantation.
3. Make a 1.2 mm paracentesis at the side of luxation or the side causing the decentration. The paracentesis must be oriented towards the enclavation site and pointing slightly downwards.
4. If required, de-enclavate haptics by carefully holding one haptic and gently pushing down on the iris bridge to release the iris fold or knuckle.
5. Re-align the IOL with the implantation axis and centre over the pupil while holding the IOL at the edge of the optic.
6. Re-enclavate the luxated haptic (step 12 of the surgical procedure for Artisan phakic IOL implantation).
7. Proceed with steps 15–20 of the surgical procedure for Artisan phakic IOL implantation.

SURGICAL PROCEDURE FOR EXPLANTATION

In some cases explantation may be required. The decision to explant is up to the judgment of the treating physician.

1. Make a main incision of 5.2 or 6.2 mm, depending on the optic diameter of the lens. The main incision should be at 90° from the intended enclavation axis.
2. Follow steps 3–5 of the surgical procedure for Artisan phakic IOL implantation.
3. De-enclavate haptics by carefully holding one haptic and gently pushing down on the iris bridge to release the iris fold or knuckle.
4. Extract the lens through the main incision.
5. Proceed with steps 15–20 of the surgical procedure for Artisan phakic IOL implantation.

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