

Innovative 360° Catheterization and Ease of Viscoelastic Delivery With VIA360™ Surgical System



A perspective from a real-world user.

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The VIA360™ Surgical System (New World Medical; Figure) has been purposefully designed for delivery of controlled amounts of viscoelastic during ophthalmic procedures. It is also indicated to cut trabecular meshwork (TM) tissue during trabeculotomy procedures.

The VIA360™ Surgical System has several unique features; for example, its ActiveInject™ Technology allows for viscoelastic delivery on-demand, when and where the surgeon wants. The catheter has the capability of extending up to 40 mm or 360° and allows for multi-axial delivery of viscoelastic, both forward and tangential to target areas. The handpiece has a rotatable cannula, which allows users to have the option of going clockwise or counterclockwise without the need for device rotation.

The handpiece is well-balanced in the hand and is comfortable and intuitive to use. The VIA360™ Surgical System has been built for performance, with several key features intended to improve the ability to deliver viscoelastic. For instance, viscoelastic is delivered through seven channels in the catheter: forward out the distal tip of the catheter and tangentially through three microchannels on either side of the catheter, located within the first 4mm of the catheter, which allow for a highly targeted approach to viscoelastic delivery. As viscoelastic delivery is

controlled by the surgeon, it is titratable, and viscoelastic can be delivered independent of catheter advancement or retraction.

ADDRESSING SURGICAL CHALLENGES

This device addresses several challenges that are often faced in surgeries. A frequent challenge occurs when using a surgical instrument that does not catheterize 360° in one pass. In these situations, a second entry site becomes necessary. While in some patients this may not present an issue, occasionally it will be difficult to make that second canal entry site, or visualization will be lost due to excess blood, which decreases the efficiency of the procedure.

Another roadblock surgeons will often encounter is the ability to fully titrate the size of their trabeculotomy. The length of the VIA360™ gives the surgeon the appropriate tension on the catheter needed to cut 180° of the TM.

CONCLUSION

The VIA360™ Surgical System allows the user to apply viscoelastic in many cases under direct visualization to achieve the desired level of targeted delivery. The surgeon can deploy over 100ul of viscoelastic, providing substantial flexibility in the amount used.

For surgeons who have previously performed catheter-based angle procedures, the adoption of this device would be relatively simple. Although there is the added skill of deploying the applicator to deliver viscoelastic, within the realm of acquiring additional skills, this is going to be manageable for most or all surgeons. For surgeons with a great deal of experience working in the canal, I believe the VIA360™ Surgical System will present them with additional treatment approaches that had not been available previously with a minimal learning curve. ■



Figure. Designed with the surgeon in mind, the VIA360™ Surgical System combines comfort with performance.

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