Cataract & Refractive Surgery TODAY

Engineered for Simplicity

VISTHESIA®: The unique combination of OVD and ancillary anesthesia.

Sponsored by an educational grant from Carl Zeiss Meditec
Ophthalmic viscosurgical devices (OVDs) are essential to the success of today’s ophthalmic procedures. In cataract surgery, injection of these OVDs protects intraocular tissue from physical trauma and helps to maintain the shape of ocular structures during the surgical procedure. There is an abundance of OVD products on the market; however, there is just one that unites the benefits of the OVD with an ancillary anesthetic.

VISTHESIA 1.0% and 1.5% (Carl Zeiss Meditec) are ophthalmic viscoanesthetic surgical devices consisting of two components: VISTHESIA topical, an OVD with lidocaine for topical application to maintain hydration of the corneal surface and for topical anesthesia, and VISTHESIA 1.0% or 1.5% intracameral, an OVD with lidocaine to protect intraocular tissue during the traumatic steps of phacoemulsification that also helps maintain the shape of the anterior chamber (Figure 1).

Combining an OVD with an anesthetic is compelling because it improves patient comfort, which in turn provides a more relaxed atmosphere in the operating room. VISTHESIA is very fitting for routine cataract surgery and it is also an excellent OVD for surgeons who are introducing cataract surgery under topical anesthesia into their clinic.

PROCEDURE

The patient is prepared for surgery by applying VISTHESIA topical to the surface of the eye, and the OVD spreads over the entire eye as the patient blinks. Once the surgical procedure starts, VISTHESIA intracameral, either 1.0% or 1.5%, depending on the surgeon’s preference, is injected into the anterior chamber with a 27-gauge cannula, thereby creating and maintaining a deep anterior chamber. Additional VISTHESIA intracameral can be used as necessary. Prior to wound closure, VISTHESIA intracameral should be completely removed using a standard irrigation and aspiration technique.

CONCLUSION

VISTHESIA 1.0% or 1.5% provides a two-step solution for corneal protection pre- and intraoperatively. The ancillary anesthetic lidocaine contained in both components ensures patient comfort pre- and intraoperatively. VISTHESIA has been used for the benefit of patients and surgeons since 2002, with more than 3 million cataract surgery procedures performed with this OVD. The opportunity for surgeons to combine topical and intracameral anesthesia with an OVD offers a significant improvement in cataract surgical techniques. Its use in retinal surgery has also been explored off-label.

In the following pages, this product is discussed in detail by Ekkehard Fabian, MD; Gerd U. Auffarth, MD; Carlos Ruiz Lapuente, MD; Joseph Colin, MD; and Karin Wallentén, MD, PhD, all of whom use VISTHESIA regularly. VISTHESIA is the next logical step in the evolution of cataract surgery.
Visco Anesthesia and Cataract Surgery

VISTHESIA is beneficial for workflow and patient satisfaction.

BY EKKEHARD FABIAN, MD

The first form of anesthesia in cataract surgery, topical cocaine, was introduced in 1883. Topical anesthesia with new agents is again popular today; it is often used in combination with intracameral application of lidocaine. Anesthetics can also be administered as peribulbar or retrobulbar injections. Today in Germany, approximately 33% of cataract procedures are done under topical anesthesia, but the majority of surgeries are still under injectable or general anesthesia.

Each anesthetic has unique chemical characteristics, points of origin, duration, and toxicity; surgeons should consider such qualities before choosing an anesthesia product. For instance, topical anesthesia has the shortest duration of effect.

The majority of patients can be operated on under topical anesthesia, assuming that the surgeon performs small incision cataract surgery. I recommend that the surgeon be comfortable with a temporal approach and performing a continuous curvilinear capsulorrhexis. Additionally, patients should be informed preoperatively that they will be under topical anesthesia. VISTHESIA (Carl Zeiss Meditec), an ophthalmic viscosurgical device (OVD) that includes 1% lidocaine, provides additional comfort to patients under topical anesthesia.

WORKFLOW

I started using VISTHESIA in 2002 because of its...
perceived benefits in the operating room. It is cheaper than general anesthesia and does not need additional intracameral lidocaine, thus the biggest advantage of VISTHESIA is its time-saving benefit. With topical and visco anesthesia, there is no need for oculopression. The lights from the microscope in the first 30 seconds may be disturbing, but the patient quickly adapts. The patient may detect more IOP changes under topical anesthesia compared with other anesthetics. However, the ancillary effect of the lidocaine included in VISTHESIA intracameral avoids these uncomfortable situations. Therefore, I especially use intracameral lidocaine in myopic (large) eyes.

There are some parameters to take into account with the use of topical and visco anesthesia, including mobility of the eye, a slightly dry cornea, patient cooperation, and need to readjust the microscope. However, these are minor adaptations that can be easily overcome by any surgeon. Still today, some patients come to our center specifically because we use topical and visco anesthesia. I use this product in the majority of the cases that I perform.

PROCEDURE
Within 45 to 60 minutes before surgery, the patient’s pupil is dilated, and antibiotics and nonsteroidal anti-inflammatory eye drops are applied up to four times. Once the patient enters the operating room, he first receives the VISTHESIA topical together with lidocaine. It only takes one drop of topical anesthesia before the patient no longer feels any pain; however, placing VISTHESIA topical on the eye two or three times will reduce the dry eye during the operation. Figure 1 depicts the injection and aspiration of VISTHESIA.

VISTHESIA should be routinely used in all operating rooms today.

CONCLUSION
VISTHESIA is the only OVD on the market to have anesthetic included in the OVD. Using this in our institution has been very beneficial for me in terms of workflow and patient satisfaction. Two of my colleagues were in the practice of using topical anesthesia in combination with lidocaine in approximately 90% of procedures. With the introduction of VISTHESIA intracameral, surgeons have reduced their use of lidocaine nearly by 100%. Now they also save time in the operating room and have seen the benefits in patient satisfaction.

Using a combined OVD and anesthesia product has been even better than I expected, with no additional complications when used in low concentrations and quieter eyes. Because VISTHESIA is a time-saving solution and helps regulate workflow, it is therefore cost-effective. It should be routinely used in all operating rooms today.

Ekkehard Fabian, MD, is in private practice in the AugenCentrum, Rosenheim, Germany, with an integrated ASC. Professor Fabian states that he is a consultant to Abbott Medical Optics Inc. and Carl Zeiss Meditec. He may be reached at e-mail: prof fabian@augencentrum.de.
Trend Toward Higher Patient Satisfaction With a Visco Anesthetic OVD

Study compared the use of VISTHESIA 1.5% and Z-HYALIN plus.

BY GERM U. AUFRARTH, MD

Recently, I performed an assessment of patient satisfaction after cataract surgery with topical anesthesia alone versus with VISTHESIA 1.5% (Carl Zeiss Meditec), an ophthalmic viscosurgical device (OVD) combined with an anesthetic (lidocaine). Not only were patient satisfaction levels higher with VISTHESIA 1.5%, but clinically I experienced an enhancement in workflow.

The prospective, randomized study was designed to determine the level of intraoperative comfort with VISTHESIA 1.5%, which is the same OVD formulation as Z-HYALIN plus (Carl Zeiss Meditec) except for the addition of 1% lidocaine. In this double-blind study, one eye was randomized to VISTHESIA 1.5% and the fellow eye to Z-HYALIN plus. Both OVDs were distributed using the same style syringe, and all cataracts were of similar densities, as measured preoperatively by the Pentacam (Oculus Optikgeräte GmbH, Wetzlar, Germany) and Scheimpflug camera.

Some of the parameters we studied included endothelial cell count, functional results, and pain score on a visual analog scale (0 to 10). The surgical set-up for all eyes was standard clear corneal cataract surgery under topical anesthesia (xylonest 2% gel). During surgery, the anterior chamber was filled with either VISTHESIA 1.5% or Z-HYALIN plus. After capsulorrhexis formation, phacoemulsification, and irrigation and aspiration, VISTHESIA 1.5% or Z-HYALIN plus was again injected to fill the capsular bag before IOL implantation. After the IOL was positioned, the OVD was thoroughly removed, and incisions were hydrated.

RESULTS

The mean preoperative endothelial cell count in both groups was 2,200 cells/mm². Figure 1 demonstrates a slight change in cell count from preoperative to 3 months postoperative (2,450 vs 2,400 cells/mm²) in a single patient—a nonstatistically significant difference. This trend was seen in the entire patient population, regardless of the OVD used (Figure 2). At 3 months, there was exactly 3.5% endothelial cell loss in the VISTHESIA 1.5% and Z-HYALIN plus groups, whereas...

Patients prefer, and had less pain with, VISTHESIA 1.5%.
older studies have between 7% and 9% endothelial cell loss. This is mostly due to the minimally invasive cataract surgical techniques used today.

Visual acuity in both groups developed normally after 3 months, with most patients achieving an acuity of 0.8. On a scale from 0 to 10, pain was minimal for both groups, 0.88 for the Z-HYALIN plus and 0.76 for the VISTHESIA 1.5% group. There was one outlier in the VISTHESIA 1.5% group who scored his pain as a 7. If this patient was removed from the data, there is a more significant difference in pain scores (0.57 for VISTHESIA 1.5%); however, for the purposes of our study this patient's pain score was included.

We also found a correlation between the pain score and the postoperative visual acuity: The better the visual acuity, the more satisfied patients are, and the less they complain about the associated pain. With VISTHESIA 1.5%, there was a clear correlation; however, it was not as clear with Z-HYALIN plus, showing that other factors influence the patient's perception of pain. We asked the 61 patients enrolled in the study, "What eye had less pain during surgery, your right or left?" A total of 63% said they had more pain in the eye that received Z-HYALIN plus (Figure 3). This intraindividual comparison is an indirect indication that patients prefer, and had less pain with, VISTHESIA 1.5%.

FROM ROUTINE TO COMPLICATED CASES

The preference for VISTHESIA 1.5% is apparent in routine cataract cases, but I also recommend its use in complicated cases such as intraoperative floppy iris syndrome or other iris pathologies. I have found that when you touch the iris several times and use iris retractors, VISTHESIA 1.5% is the best option. This is also true for eyes with small pupils or pseudoxefoliation, because surgery takes longer. Prolonged surgical time can be perceived as painful for the patient.

I also think that VISTHESIA 1.5% is a wise choice for other complicated cataract procedures, such as extracapsular cataract extraction and other techniques that require increased manipulations of the eye. In such situations, a combination of topical anesthesia and VISTHESIA 1.5% would be very helpful. Another scenario where VISTHESIA 1.5% is the optimal choice is for inexperienced surgeons and residents who need more time to complete a cataract procedure. In these situations, topical anesthesia alone may not be effective enough. VISTHESIA 1.5% is a unique product, with an abundant amount of possibilities for its use. The more you think about it, the more you realize that it is an interesting choice for multiple indications.

CONCLUSION

In general, the more quiet the patient and the less pain he perceives, the shorter the procedure time. Saving 3 or 5 seconds in a 10-minute procedure does not matter, but the patient's level of comfort does. For me, the big advantage of using VISTHESIA 1.5% is that the patient is more relaxed, which means that he is not squeezing his eye or moving his head. This makes the surgery safer. I perform cataract surgery in a lot of complicated cases, as many of my patients have pseudoxefoliation. I use VISTHESIA 1.5% a lot. I like to think of OVDs as instruments, and I choose the best OVD depending on the specific environment. In many cases, this is VISTHESIA 1.5%.

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VISTHESIA in a High-Volume Clinic

This OVD with lidocaine is perfect for vitrectomy and routine cataract cases.

BY CARLOS RUIZ LAPUENTE, MD

After using VISTHESIA (Carl Zeiss Meditec) in more than 20,000 cataract and vitrectomy surgeries, I have devised three scenarios in which its use is crucial: (1) fast track or large-volume waiting lists with variable pupillary dilation and sedation condition, resulting in eyes with poorly dilated pupils, (2) combined procedures (Figure 1), and (3) eyes with myopia. In these situations, I undoubtedly trust the additional anesthetic properties of this OVD to keep my patients comfortable.

In our hospital, we perform more than 7,000 procedures with VISTHESIA each year. In a high-volume setting such as ours, patient safety and comfort is the first priority, and any product or practice that enhances patient comfort will enhance the workflow. In addition to using VISTHESIA in the scenarios mentioned herein, I also believe in its use for routine cataract surgery whenever possible.

PROTOCOL: MANDATORY USE

We must consider the risk of onsite manipulations or dilutions of direct intracameral lidocaine, because of the potential for infection and endothelial damage. Whenever the pupil is the source for potential discomfort, the addition of lidocaine 1% is mandatory; its application in the form of VISTHESIA is the only way to add lidocaine 1% without causing any hazardous manipulations.

Scenario No. 1: Fast track settings/poorly dilated pupils. Whenever you have suboptimal dilation, VISTHESIA helps to guarantee that the patient will remain pain-free throughout the duration of the procedure. In routine cataract surgery, especially in large-volume settings with a fast track, you can never ensure that patients are properly dilated. The pupillary size might be in the decreased part of the curve when you finally get the patient into the operating room, which can in return decrease patient comfort. Clinically, the ideal scenario is that the surgeon has only three to five cases to perform in a very controlled environment; however, this is never going to happen in a large-volume setting.

Scenario No. 2: Combined procedures. VISTHESIA is also beneficial whenever you have to manipulate the iris or constrict the pupil after the procedure. One example is combined cataract and glaucoma surgery. In this situation, it is important to use VISTHESIA after IOL implantation because constricting the pupil can be uncomfortable for the patient.

At the end of some procedures, the surgeon may need to block excess outflow to avoid the early complication of postoperative hypotony (Figure 2). VISTHESIA is a great tool for subconjunctival injections, because the surgeon can control the surgical situation knowing that the patient is pain-free.

Scenario No. 3: Myopic eyes. In the presence of a very wide or large anterior chamber, it is common for pressure to build over the root of the iris with any manipulation. VISTHESIA provides additional stability and control so that you can confidently proceed with the necessary manipulations of the eye. Additionally, it is useful to apply VISTHESIA if and when intraoperative floppy iris syndrome is present, as with any other source for iris fluctuation.

Figure 1. Subconjunctival VISTHESIA for combined or vitreoretinal procedures and maneuvers.
OTHER CASES FOR VISTHESIA

There are a number of significant cases in which the use of VISTHESIA is almost unavoidable, for example whenever you perform a planned iridectomy. The alternative would be an infusion of lidocaine within the anterior chamber. The benefit of using VISTHESIA is that it coats the iris during the entire procedure; there is no need to reapply VISTHESIA, whereas the infusions of lidocaine must continually be renewed. Furthermore, its preparation is more prone to changes or contamination.

I typically use VISTHESIA any time I insert a Malyugin Ring (MicroSurgical Technology, Redmond, Washington), such as with pupilary enlargement and pupilloplasties in cases of uveitis and long-standing glaucoma treatments. I also use VISTHESIA in any cases of lens exchange or retrieval, with anterior chamber lens implantation, and whenever I perform surgery in the posterior segment with the potential for anterior uveal discomfort.

Another indication is what we call topical vitrectomy, which in fact combines topical and subconjunctival vitrectomy. Typically, vitrectomy is a subconjunctival procedure, but the viscoelastic properties of VISTHESIA control the egress of the vitreous, leaving no room for contamination or endophthalmitis. When performing vitrectomy, topical anesthesia is applied first, followed by subconjunctival injection of VISTHESIA to achieve a double benefit. Additionally, the coating provided by VISTHESIA topical ensures a good seal between the cornea and the contact lens; VISTHESIA intracameral can also be injected into the anterior chamber depending on the specific surgical procedure.

PATIENT COMFORT

Using VISTHESIA in any vitrectomy procedure is beneficial because the patient is very comfortable. You can request the patient to look up or down, allowing you to reach areas in the eye that you may not possibly reach under other forms of anesthesia or without assistance from surgical assistants. Additionally, VISTHESIA allows scleral indentation without pain. The only limitation for the use of VISTHESIA in vitrectomies is a scarred conjunctiva, which would not allow the bleb to be configured for the entry of surgical trocars, cannulas, or other instruments.

I can save approximately 9 minutes per vitrectomy case using VISTHESIA compared with other forms of anesthesia. However, in routine cataract surgery, its benefits are more about patient comfort. VISTHESIA provides the security of knowing the patient has maximal comfort in spite of suboptimal conditions, such as pupil size. Additionally, change of surgical plans may occur or a complication may arise, and you cannot afford to put the patient in the position of possibly feeling pain.

CONCLUSION

In my opinion, it is better to control pain with one product versus multiple products. VISTHESIA has been a great product to add to my operating room. Its viscoelastic capacity, along with the anesthetic effect of lidocaine, produces less likelihood of contamination. Furthermore, many surgeons have had at least one bad experience with a pharmacist’s preparation of intraocular solutions. Finally, the surgeon is ultimately responsible for the preparation of anesthesia and the patient’s comfort. Patient comfort is the surgeon’s security.

* Editor’s Note: VISTHESIA 1.5% and VISTHESIA 1.0% are not CE marked for use in vitreoretinal surgery.
* Editor’s Note: VISTHESIA 1.5% and VISTHESIA 1.0% are not CE marked for use in glaucoma surgery.
* Editor’s Note: VISTHESIA intracameral should be completely removed at the end of the surgery.

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Recent Developments in Topical Anesthesia

A revolution for cataract surgery.

BY JOSEPH COLIN, MD

The development of topical anesthesia for use in cataract surgery is one of the most innovative concepts of modern surgical techniques. For me, gone are the days of general anesthesia and anesthetic injections. Topical is my preference today. Some surgeons continue to rely on these other methods to ensure patient comfort throughout the procedure; however, the number is decreasing as more surgeons come to understand the apparent benefits of topical applications: the shorter preparation and application times; the eliminated risk of retrobulbar hemorrhage or bulbar trauma related to injectable anesthesia; and the uninterrupted vision for patients. Additionally, topical anesthesia is perhaps safer, especially for patients who are on anticoagulation medications to reduce the risk of cardiovascular complications.

**TOPICAL VS TOPICAL PLUS INTRACAMERAL INJECTION**

Topical anesthesia is nothing short of a revolution for cataract surgery. According to a survey of French ophthalmologists, conducted by Richard Gold, 38.1% of respondents said that they used topical alone in 2008, which was an increase from the 35.1% and 33.21% who used topical alone in 2007 and 2006, respectively (Figure 1 and Table 1). However, there are disadvantages to using topical anesthesia alone, namely the potential for patients to feel sudden discomfort intraoperatively with manipulations, such as when touching the iris, in cases of intraocular pressure (IOP) fluctuations, and when the IOL unfolds in the eye.

Therefore, some surgeons prefer to use topical anesthesia in combination with an intracameral injection of lidocaine, and in 2008, 19.8% of French cataract surgeons who responded to the survey used this combination. This was a slight decrease from the 20% and 20.6% who preferred this combination in the previous 2 years, respectively. There can, however, be disadvantages to using intracameral injections of anesthesia as well, such as the fact that there is no commercially available solution approved for intracameral injection. The associated risks include dilution or wrong dosage, corneal endothelial damage, or toxic anterior segment syndrome, which may complicate surgery.

**BENEFITS OF VISTHESIA**

I have found much benefit in using VISTHESIA
We incorporated the use of VISTHESIA almost 6 years ago and continue to routinely use it in almost all cataract patients. (Carl Zeiss Meditec). The advantages of this combined ophthalmic viscosurgical device (OVD) and anesthetic are to prevent the previous disadvantages associated with topical alone or topical plus intracameral. Incorporating the use of VISTHESIA means more comfort for the patient and more comfort for the surgeon. I feel relaxed knowing that patients will be pain-free throughout the duration of the procedure. For instance, I can use iris retractors and remain confident that I am not inducing any pain. At the Bordeaux University Medical School, we do not use any systemic sedation because we are very confident in the efficacy of VISTHESIA.

We incorporated the use of VISTHESIA almost 6 years ago and continue to routinely use it in almost all cataract patients. In our experience, patients appreciate this option because there is no injection and therefore a less aggressive form of anesthesia. Another nice thing about using VISTHESIA is that there was no change to our surgical process, which is described in detail herein.

VISTHESIA means more comfort for the patient and more comfort for the surgeon.

Before applying VISTHESIA to the ocular surface, we use betadine to reduce the risk of infection. The patient is informed that he may feel a few seconds of a tingling sensation during application of the VISTHESIA, but immediately afterward he should be pain-free and comfortable. Next, the anterior chamber is filled with VISTHESIA intracameral so that the continuous curvilinear capsulorrhexis can be formed and phacoemulsification initiated. We then inject a second round of VISTHESIA intracameral before IOL implantation, to maintain patient comfort throughout the unfolding of the IOL.

Great care is taken to remove the remaining OVD from the anterior chamber and from behind the IOL in the bag, which subsequently avoids any postoperative increases of IOP as well as any potential corneal toxicity as seen in some high-risk patients with Fuch’s endothelial dystrophy.

I remove all OVD after checking the location of the IOL, making sure it is in the bag and centered. Using the I/A probe, I first wash the anterior chamber and then remove the OVD from behind the optic of the IOL inside the capsular bag.

RESIDENT TRAINING

VISTHESIA is also an indispensible tool for resident training. Teaching cataract surgery is not always easy under topical anesthesia alone, as the procedures typically take extra time under the care of virgin hands. Years ago, residents seemed to be confident performing their first cataract surgeries with the patient under peribulbar anesthesia; however, as the trend shifted away from its use residents found other anesthetics with which they grew comfortable with. VISTHESIA is at the top of this list, because they can be trained with a high degree of safety using modern cataract surgery techniques. I recommend it to all of my residents and use it routinely myself. ■

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### Table 1. Percentage of Cataract Cases Performed Under Topical Anesthesia in France

<table>
<thead>
<tr>
<th></th>
<th>2008 (%)</th>
<th>2007 (%)</th>
<th>2006 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topical alone</td>
<td>38.1</td>
<td>35.1</td>
<td>33.21</td>
</tr>
<tr>
<td>Topical + intracameral</td>
<td>19.8</td>
<td>20</td>
<td>20.6</td>
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<tr>
<td>Peribulbar</td>
<td>28.9</td>
<td>30.2</td>
<td>31.6</td>
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<tr>
<td>Sub-Tenon</td>
<td>9.1</td>
<td>11</td>
<td>10.6</td>
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Survey conducted by Richard Gold
ENGINEERED FOR SIMPLICITY

Long-Term Experience With VISTHESIA

This formulation saves time in the operating room.

BY KARIN WALLENTÉN, MD, PhD

The importance of ophthalmic viscosurgical devices (OVDs) is indisputable, and the number of surgeons who rely on its protective benefits are numerous. When applied intraoperatively, OVDs not only protect intraocular tissue and the various segments of the eye, but they also create stability during the traumatic manipulations associated with ophthalmic procedures. OVDs create and maintain space in the anterior chamber and capsular bag during cataract surgery, allowing the surgeon to confidently perform phacoemulsification and lens implantation.

Simply put, VISTHESIA (Carl Zeiss Meditec) is my OVD of choice. However, this product is more than just an OVD; it also has anesthetic properties. By combining the protective qualities of an OVD with the pain-relieving qualities of lidocaine, I can assure that patients will be comfortable while I am working inside their eye. VISTHESIA has two components, (1) topical to maintain hydration on the corneal surface and provide topical anesthesia and (2) intracameral to protect the eye during surgery. In my practice, we prefer to use only the intracameral formulation.

EXCELLENT CHOICE

VISTHESIA is not just a good choice for inexperienced surgeons who may take a little longer to operate or surgeons who are transitioning to the use of topical anesthesia, but it is also an excellent choice for surgeons in high-volume clinics and those who want to offer patients the optimal chance for a pain-free, positive surgical experience. After practicing cataract surgery for many years, I have come to find that the benefits of VISTHESIA far surpass the qualities of any other OVD.

I have been using this product since 2004. If I had to decipher the top three benefits of VISTHESIA, in order, they would be: the time it saves in the operating room, the decreased risk of contamination (because we don’t have to use an extra syringe for anesthesia), and the level of patient comfort it provides. Secondary reasons for its use include the superb optical clarity, which does not inhibit my view of the eye during surgery, and the ease of removal with irrigation and aspiration at the end of the procedure.

The benefits of VISTHESIA far surpass the quality of any other OVDs.

CASES FOR THE USE OF VISTHESIA

At my clinic, we use VISTHESIA in every single cataract surgery procedure we perform. It is our standard of care, with all surgeons preferring its use to any other OVD. With that said, there are certain cases where the use of VISTHESIA is extremely warranted, such as any case for which surgery is expected to run long or has the risk for complications. If the nucleus is exceptionally hard and phacoemulsification will take longer than normal, VISTHESIA will keep the patient pain-free until it is removed from the eye at the end of the procedure. My cataract surgeries usually last between 7 and 10 minutes, but if I know that a particular case will run longer than this, I tend to use both VISTHESIA and an additional viscoadaptive OVD. This strategy maintains the ocular structure and acts as a supplementary protection for the endothelium. For example, if the patients’ nucleus is grade 3 or 4, or if there is a presence of Fuchs’ endothelial dystrophy or zonular weakness, I will use two OVDs.

Some surgeons are concerned that lidocaine may have a toxic effect on the endothelium if left on the eye for more than 20 minutes. With VISTHESIA, this worry is eliminated. My surgical technique includes one paracentesis followed by application of VISTHESIA to the anterior chamber. After application of the OVD, I create the main temporal clear corneal incision. I create the capsulorrhesis, perform phacoemulsification and irrigation and aspiration, and then I re-apply VISTHESIA before inserting the IOL into the eye. I am careful to remove all of the VISTHESIA from the capsular bag at the end of surgery.

My patients do not complain of pain or even discomfort during surgery. When combined with the fact that VISTHESIA saves me time in the operating room and reduces the risk of contamination, I believe this product is the standard of care for cataract surgery.

I believe this product is the standard of care for cataract surgery.

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