VISIONARY

2023 EDITION

GIVING BACK CLOSE TO HOME

FORSEE Canada – from scholarships to serving the community

THE RISE OF COSMETICS IN A POST-PANDEMIC WORLD

Introducing Fotona 4D treatment

SAY BYE to DRY EYE

Dry Eye Research: A study for better patient comfort

2023:
OUR VISION OF THE NEW NORMAL

Through this pandemic, healthcare heroes have worked relentlessly towards a brighter future. Moving forward, we take time to reflect on our past year with U Vision Group. We give thanks to the entire team, not only to our dedicated ophthalmologists but the frontline staff and those who worked tirelessly in the background to support us. As we learn to live with a new normal in 2023, we celebrate in Visionary a small slice of our story and successes this year.

Each year, we continue to grow. In 2022, we expanded our medical division, Uptown Eye Specialists, by welcoming two new physicians: Dr. Victoria Leung, our new oculoplastic specialist, and Dr. Lili Tong, a comprehensive ophthalmologist. We hope you join them as they share their journey at Uptown.

At U Vision Group, our patients are our priority. Dive into the windows of the soul (or, in this case, the body) as we explore the impact of other medical conditions on your ocular health, with a focus on sleep apnea. Learn more about the treatment modalities for common eye conditions, including retinal injections, medical and surgical glaucoma treatment, and cataract surgery. We are never satisfied with the status quo. Patient care is driven by knowledge, and we are proud at U Vision Group to support collaborative efforts driven by our summer scholars. In this issue, we share just one of our many research endeavors for a common condition, dry eye, and explore the advanced dry eye management offerings at our clinic.

As we journey from common eye conditions, we move toward the realm of medical aesthetics. At U Eye Laser Cosmetics, our cosmetics division, we are continually growing our services to meet the needs of our patients. Join us as we highlight our new Fontana laser, providing a new range of services to help you look your best.

At U Vision Group, we always go above and beyond, even beyond the physical boundaries of our office, through our support for FORSEE Canada. This year, we arranged various outreach initiatives, both locally and internationally, leading our physicians, medical students, and technicians to give back to the community.

As the pandemic continues, we thank our team for their unwavering dedication. We are a team of diverse ophthalmologists providing care from comprehensive to subspecialty and ranging from cataracts, glaucoma, pediatrics, retina, and oculoplastic to cosmetic procedures.

We wish everyone a healthy year ahead. Stay connected with us as we navigate our vision of the new normal.

U Vision Group

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> ***When patients dry eyes are treated prior to surgery, it makes the outcome better.*** **DR. CHIU**

DR. SOMANI ADVANCES THERAPY OPTIONS:

SLEEP APNEA & THE EYE

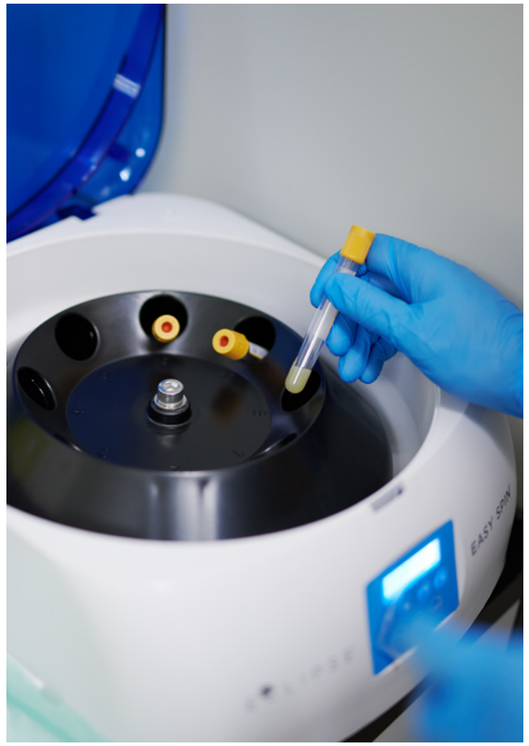
Diabetic Macular Edema (DME) is the leading cause of vision loss in diabetic patients worldwide. While treatment is available, it involves monthly injections of anti-vascular endothelial growth factor, or anti-VEGF, creating a significant treatment burden. Still, one-third of patients receiving anti-VEGF treatment will respond suboptimally. Such a substantial number of unsuccessful treatment paths prompted Dr. Somani, one of Uptown Eye's advanced retina specialists, to study DME-positive patients for signs of undiagnosed obstructive sleep apnea, or OSA. Obstructive sleep apnea is one of the most underdiagnosed and undertreated multisystem disorders, which may be due in part to the tedious diagnosis burden. Using gold standard sleep trials, Dr. Somani and his team followed patients for a year to gather meaningful data for the study.

Conclusively, 70% of DME-positive patients have undiagnosed obstructive sleep apnea.

OSA is an inflammatory disease, like diabetes, in which throat muscles relax, starving the tissue of oxygen. This hypoxia creates inflammatory mediators, from which these DME patients are already suffering, explaining a possible reason why anti-VEGF treatments are not always effective. Apnea adds new inflammatory chemicals into the mix, exacerbating DME, amassing disease, and creating further resistance to treatment. Once diagnosed, patients can begin treatment for OSA; most commonly, this is with continuous positive airway pressure (CPAP) machines that require fitting a mask over your airway for the entirety of your time asleep, delivering constant air to your system. While this is a taxing treatment regime, patients treated for apnea respond better to anti-VEGF injections. With fewer inflammatory mediators added to the body, positive treatment response is higher.

Primary care physicians routinely ask patients about common core morbidities such as symptoms of hypertension, blood pressure, and cholesterol, but Dr. Somani thinks they should be adding sleep apnea to this list. Unlike other organs, photoreceptors in the eye, once dead, are not replaceable, even with reduced inflammation and fluid. Apnea treatment creates less inflammation, so the retina tissue is more viable. *“Treat early, treat successfully, maintain healthy tissue because that’s the same tissue you’re going to rely on for the next 50 years,”* says Dr. Somani.

Treatment options for DME are still limited due to our constrained understanding of the disease. As we continue to focus on one primary inflammatory mediator, anti-VEGF, other biomarkers of disease are becoming more accessible. Stubborn cases of DME are sometimes treated with steroid injections, which can block more than one mediator but have other ocular side effects. While they have their place in the treatment regime, it may be time to target other available tools to continue studying this disease.



UPTOWN EYE AT THE FOREFRONT OF DRY EYE TREATMENT

Dry Eye Disease is one of the most common diseases ophthalmologists encounter in day-to-day practice. There are two main types of dry eye: Aqueous Dry Eye and Evaporative Dry Eye (EDE). The latter of the two, EDE, is the most common type of Dry Eye Disease, making up 65% of dry eye patients. This is caused by Meibomian Gland Dysfunction and is often straightforward to diagnose.

The meibomian glands line the inner eyelids and secrete oil to keep the eye surface tear film from evaporating. However, if the gland doesn't make enough oil or secretes poor quality oil, this can cause dry eye. If this happens persistently, there may be Meibomian Gland Dysfunction. Those that face chronic dry eye due to Meibomian Gland Dysfunction are likely given a treatment regimen of continuous eye drops or a warm compress, with more severe cases being prescribed oral antibiotics or omega-3 supplements. Unfortunately, these treatments typically don't provide long-term relief. At Uptown Eye, dry eye is approached with personalized care, which is why having many options available is vital. Over the last few years, Dr. Sohel Somani published two studies on the safety and efficacy of new dry eye treatment options.

UltraView Dry Eye Laser™

A type of intense pulsed light therapy (IPL), using a versatile BroadBand Light (BBL) platform, is referred to as UltraView Dry Eye Laser™ (DEL) and has been used in other fields of medicine, specifically dermatology. In recent years, IPL has been a successful treatment for dry eyes by emitting a specific wavelength of pulsed light from a handheld device to the skin near the eyelid. This has many results, including reducing inflammation, mediating the vascularized tissue response, and modifying meibomian gland production, ultimately facilitating improved quantity and quality of the excreted oils. UltraView DEL™ can be delivered continuously over larger areas, increasing the effectiveness of treatments. Dr. Somani and his team completed a study in which dry eye patients received UltraView DEL™ once a month for four months. More than 85% of patients with moderate to severe dry eye reported an improvement in their eye symptoms. For those that make successful candidates, UltraView DEL™ therapy is a preferred alternative to other MGD-targeted therapies because it offers more precision, efficacy, and durability, with no additional risks.

Platelet Rich Plasma

A unique treatment for dry eye is the use of Autologous Serum (AS) drops. While created with patient's own blood, these drops do not contain a significant concentration of platelets as they are removed during the creation process, leaving a similar composition to tears. However, an advanced version of this, Platelet Rich Plasma (PRP) drops, are also made from patients' blood by venipuncture and a series of centrifugations, but retain a viable concentration of platelets in the mixture. Once created, PRP drops contain 1.5 times as many platelets as typical AS drops. Whereas Autologous Serum drops have their place in the treatment regimen, it is likely more effective for mild to moderate cases of dry eye. PRP drops can then be recommended for more severe cases of EDE in addition to a plethora of complex corneal diseases. While PRP drops have been reported to be a successful addition to the dry eye regiment, Dr. Somani and his team completed the first study to look at the effect of PRP drops on the meibomian gland structure specifically. Patients used PRP drops six times a day for a month, and all patients reported improvement in their dry eye symptoms. Many of these patients also had an improvement in the structure of the meibomian glands themselves, potentially reducing the need for further complex treatments. However, PRP is not always as readily available in most areas, unlike Autologous Serum and other types of dry eye treatment, which are often more attainable. Nevertheless, PRP is an excellent way to round out an ophthalmologist's tool kit should it be the right fit for the patient at hand, and is one of many treatments available at the Uptown Eye Specialists Dry Eye Clinic.

Uptown Eye is at the forefront of dry eye treatment, with a specialized clinic dedicated to the condition. Dry eye can often be overlooked or ignored, but it's a multifactorial disease that can hinder quality of life. With a multitude of tools at its disposal, Uptown Eye is bound to have the ideal solution for any patient.

INDIVIDUALIZED CARE:

ADHERENCE AND COMPLIANCE IN GLAUCOMA MEDICAL THERAPY

Glaucoma is the leading cause of irreversible blindness worldwide. A recent national survey revealed that 45% of Canadians aged 50 and older are unaware that glaucoma is one of Canada's leading causes of blindness. In general terms, glaucoma is a chronic, progressive, multifactorial disease characterized by optic neuropathy and progressive visual field loss. Intraocular pressure (IOP) is the only modifiable risk factor, and lowering IOP to a level that is unlikely to cause further optic nerve damage is the mainstay of therapy. Treatment modalities for glaucoma fall into three broad categories: medication, laser, and surgery. The focus here will be medication-related challenges, specifically adherence and compliance, and strategies that may promote success.

Medication adherence and compliance are integral to successful treatment regimens. According to the National Stroke Association, medication **ADHERENCE** is the act of filling new prescriptions or refilling prescriptions on time. Medication **COMPLIANCE** is the act of taking medication on schedule or taking medication as prescribed. There is a body of evidence in the literature demonstrating that glaucoma medical therapy adherence and compliance is a paramount problem for eye care providers. Compounding the problem, patients naturally want to please their doctor, which makes them reluctant to admit to non-adherence and non-compliance. It's important to highlight that adherence and compliance do not solely apply to medication. Non-compliance can pertain to glaucoma diagnostic testing and follow-up visits with the doctor. However, here we will narrow the discussion to glaucoma medications.

"It's hard to get patients to adhere and comply to therapy," says Dr. Darana Yuen, a glaucoma surgeon at Uptown Eye. *"Without treatment, you can get worse. Even with proper treatment, if there's non-compliance, a patient can get worse, as they are not deriving the full benefit from their treatment, and the disease is not well controlled."*

Non-adherence and non-compliance to anti-glaucomatous therapy is rarely due to a patient's lack of interest in preserving vision but rather due to a series of obstacles or barriers that prevent success.

Glaucoma is an asymptomatic chronic disease

Glaucoma is the "silent blinder" or the "silent thief of sight," making it difficult to get patient buy-in to intervention. Glaucoma patients are at heightened risk for non-compliance and non-adherence to their prescribed regime due to the asymptomatic nature of glaucoma, and the lifelong need for therapeutic regimen without apparent subjective improvement, even with diligent therapy.

PRO-TIP: Build a strong therapeutic relationship from day one

Dr. Yuen attests that the first few visits with a patient are critical in establishing a strong therapeutic bond and allow her to lay the groundwork for patient buy-in. If both the patient and physician are on the same page, it makes subsequent visits easier. To ensure that patients understand the need for treatment, Dr. Yuen shows patients their visual field deficits and highlights the abnormalities on their OCT or HRT scans.

There is a lack of understanding of the disease and treatment

Throughout her twelve years of practice, Dr. Yuen has encountered many misconceptions about glaucoma. Some believe that glaucoma can be "cured" or that the doctor can "fix" the glaucoma. Others are of the mindset that missing their drops a few times a week is still considered high compliance, and the timing of the drops is irrelevant as long as the drops are administered.

PRO-TIP: Educate and manage expectations

Dr. Yuen believes that managing patients' expectations is crucial. If a patient expects their vision to improve with medical therapy, but it doesn't, they will lose trust. Dr. Yuen always makes a point to counsel patients, explaining that the goal of treatment is to keep their remaining vision so that *"their eyes outlast them."* She also clarifies that *"there's no getting it back once the vision is gone."* Dr. Yuen perceives her role as not only a surgeon, but also an educator. She shares, *"Knowledge is power. If a patient understands the disease, they will grasp the importance of treatment."* She aims to present educational material

to patients in both written and verbal form, to be repetitive with key information, and to give patients ample opportunity to ask questions. Since the start of the COVID-19 pandemic, Dr. Yuen has utilized virtual telephone appointments for more in-depth counseling should a patient need more time for discussion.

Patients may have financial constraints
Patients may not be forthcoming with their inability to obtain medication supply. *"Not everyone has insurance, or sometimes it's not full coverage,"* shares Dr. Yuen. *"Not all medications are on ODB formulary for seniors."* Expenses can add up quickly when a patient is on more than one medication or if one medication is ineffective or intolerable, and a subsequent medication change is required.

not have their medications on hand. Even if a patient were to have the drops with them, they might find it inconvenient to pause their activities to instill the drops. When glaucoma medications are dosed a few times a day, especially with several medications, it can be quite disruptive to a patient's lifestyle and hinder their quality of life.

PRO-TIP: Simplify regimen & provide tools for compliance
A 2022 study on glaucoma adherence showed that patients on a more complex treatment plan were less likely to take their medication on time and less likely to take the proper amount of medication daily. Dr. Yuen's approach is always to reduce the number of bottles or drops to the minimum required. This can often be accomplished with fixed combination medications or extended-release medications.

Ocular co-morbidities may exist
Some patients are motivated to comply but have difficulty tolerating the medication's problematic side effects, such as hyperemia, stinging, burning, or blurriness. Glaucoma-related ocular surface disease (OSD) is a common yet often underdiagnosed ocular comorbidity, affecting between 40-60% of glaucoma patients worldwide. Glaucoma and dry eye disease are associated with aging, making it more likely that a glaucoma patient also suffers from dry eye. Not only can topical glaucoma medications induce OSD, they can also exacerbate pre-existing OSD. The negative impact that OSD can have on patients' compliance to topical glaucoma medications is well established.

> ***Knowledge is power. If a patient understands the disease, they will grasp the importance of treatment.***
>
> **DR. YUEN**

PRO-TIP: Have an ongoing open dialogue
When prescribing medication, Dr. Yuen always considers cost. She believes that having an open dialogue with patients about their ability to fill the prescription is essential. She checks in periodically as a patient's work, finances, or health benefits may evolve over time. If obtaining medication is still a hurdle, Dr. Yuen will not only provide samples, but will advocate for the patient's access to medication support programs.

Therapy creates a significant time hindrance
Patients are on the go and living busier lifestyles than ever before. Given the multitude of responsibilities one faces, such as work, kids, appointments, and more, many patients find it difficult to remember to put in the drops. Some patients may not be at home when it's time to administer the drops and do

According to Dr. Yuen, education regarding the administration of eye drops seems to be one of the critical communication variables that significantly boosts compliance in her patients. Dr. Yuen provides the patient with a set time for medication administration, tailored to the patient's sleep-wake routine. Not only is the "drops schedule" reviewed verbally in person, but Dr. Yuen ensures the patient leaves with written instructions to avoid confusion once the patient returns home. Furthermore, she ascertains that patients have the proper tools to administer the drops at the correct times. *"We can help patients notice what they're doing. Giving them tools allows patients to measure their own compliance to therapy. They could keep a diary, have a medication chart, set an alarm, or even set a calendar, email, or text alert,"* offers Dr. Yuen.

PRO-TIP: Be proactive & opt for "dropless" options
Given the high prevalence of glaucoma patients with OSD, it makes sense to be proactive in aggressively managing OSD. Getting the ocular surface as healthy as possible increases the tolerability of glaucoma medications. Careful selection of glaucoma therapies that do not exacerbate OSD is equally important. Preservative-free medications such as preservative-free latanoprost or preservative-free dorzolamide-timolol are Dr. Yuen's first-line glaucoma topical agents. That said, Dr. Yuen adds that "none is better than one" when it comes to bottles of glaucoma medication. It is important for patients to be educated on their options for therapy and to be aware that their choices are not limited to topical medical therapy. Selective Laser Trabeculoplasty (SLT) is a laser that Dr. Yuen routinely utilizes

in her armamentarium to eliminate or reduce a patient's need for glaucoma eye drops. This leads to a more simplified regimen, improved ocular surface health, and better tolerability, all of which translates into improved adherence and compliance. Other "dropless" therapies include minimally invasive glaucoma surgery (MIGS) (e.g., iStent, or XEN) and sustained-release implants (e.g., bimatoprost sustained release (BimSR), also known as Durysta). These alternatives are so powerful that if drops are eliminated, they can potentially take compliance right out of the patient's hands. Dr. Yuen likes to tell patients that she will do the work for them so that they don't have to do the work at home.

Patients often have medical co-morbidities.
Glaucoma may be only one of many other chronic conditions a patient struggles with. For example, diabetes, hypertension, hypercholesterolemia, heart disease, insomnia, and obesity are not uncommon co-morbidities in the aging demographic. A patient can reach their breaking point, consumed by not only the suffering from these co-morbidities, but also by the demands of intervention and treatment. *"It can be hard for them to hear more bad news, that they have glaucoma on top of everything else that they're dealing with,"* conveys Dr. Yuen.

Furthermore, some pre-existing conditions can directly influence adherence and compliance to glaucoma therapy. For example, if a patient has Alzheimer's, memory problems will impede their ability to know when to take their medication. If a patient is afflicted with arthritis, they may have difficulty squeezing the medication bottle to instill the drops. A patient with a hand tremor could have difficulty accurately instilling the drops into the eye.

PRO-TIP: Minimize medication burden & manage the "whole" patient
Given that patients with co-morbidities are likely on many other systemic medications that require their commitment, minimizing anti-glaucoma drops will aid in compliance and adherence by reducing the patient's total medication burden. Of even greater importance is the recognition of physical or cognitive disabilities and managing the "whole" patient versus solely focusing on the glaucoma alone. Personalized care means gaining insight into the patient's perspective as to what the barriers are and then providing tangible solutions. For example, if a patient has memory loss or physical challenges in instilling the drops, enlisting the help of a family member or caregiver may improve compliance and adherence significantly.

Glaucoma medication adherence and compliance is a nuanced topic. There is a myriad of causes for non-adherence and non-compliance. As critical as recognizing what the barriers are, finding the tools to mitigate them is even more vital. Like the barriers themselves, solutions are respective to a patient; unfortunately, there isn't a recipe or a one-size-fits-all. However, there are general principles applicable to many.

"At the end of the day, we're talking about patient-centric and individualized care," Dr. Yuen concludes. *"Viewing the patient holistically and not just the disease itself. The partnership between the patient and the physician is everything. To educate, be on the same page, and understand not just the disease but the treatment. If you get buy-in from the patient, a lot of these barriers to non-compliance and non-adherence, other than the ones that are obviously out of their control, would be almost a non-issue because taking their medication would top priority. Ultimately, it's our joint success."*

INTRAVITREAL INJECTIONS:

EVERYDAY PROCEDURES THAT SAVE VISION


DR. WEISBROD


DR. TONG

An intravitreal injection is a procedure in which medication is injected directly into the back of the eye, into a space called the vitreous cavity. Different types of medications can be injected intravitreally, including anti-VEGF agents, steroids, or antibiotic/antiviral medications.

"We've been doing intravitreal injections at Uptown since our inception; it's one of the more common procedures that we perform for patients with retinal diseases," says Dr. Daniel Weisbrod, a Medical Retina Specialist at Uptown Eye. *"When anti-VEGF came out, it was really revolutionary."*

Some of the most typical diseases treated with intravitreal injections include Wet Age-related Macular Degeneration, Diabetic Macular Edema, and Retinal Vein Occlusion.

Wet Age-related Macular Degeneration
(AMD) is a chronic disorder that causes loss of central vision. Generally, this is caused by abnormal blood vessels that can leak fluid or bleed into the macula, the part of the retina responsible for central vision. AMD is the leading cause of permanent vision loss in people over age 50. There are now three approved intravitreal injections for AMD: Ranibizumab (Lucentis), Aflibercept (Eylea), and Brolucizumab (Beovu). All three are anti-VEGF treatments.

Diabetic Macular Edema
(DME) is caused by fluid leaking into the macula, accumulating to cause swelling. DME is the leading cause of blindness in young adults in developed countries. Ranibizumab (Lucentis) and Aflibercept (Eylea) are used to treat DME. Steroids are sometimes used as a second-line treatment where anti-VEGF isn't as effective for the patient.

Retinal Vein Occlusion
(RVO) occurs when a blood clot blocks veins in the eye that carry blood to the retina, occurring most often in people with cardiovascular disease. Without proper blood flow to the retina, vision can be lost. RVO is widely treated with Ranibizumab (Lucentis) and Aflibercept (Eylea) injections.

"These diseases are expected to increase in incidence over time, and the burden of treatment is significant. As a medical retina specialist, that's a more common treatment that we give," states Dr. Weisbrod.

Intravitreal injections are performed in the office as a quick outpatient procedure. After numbing is applied, the eye is cleaned thoroughly to ensure a sterile environment. The medicine is injected into the eye with a small needle, with the patient feeling little to no pain. Once the injection is complete, the eye is washed out, and the procedure is finished.

"Most of these visits are quite quick. The injection itself is about 5 minutes tops," conveys Dr. Lili Tong, an ophthalmologist at Uptown Eye. *"It's pretty low maintenance. Preparation for the injection is most important. Afterward, there are usually no antibiotics and no restrictions."*

While the injection itself is quick, patients are often set on a strict treatment regimen based on the disease and its incidence. Receiving an injection is not a one-and-done procedure. For patients with AMD, once treatment begins, rarely does it stop. Starting with injections every month, once the disease is stabilized, patients may be able to extend treatment intervals. Treatment can often be tapered in DME patients. Dr. Weisbrod shares, *"The burden of treatment is highest at first and can go down with time."*

> ***"In general, people can gain a lot of vision back if we catch it on time, and we can prevent blindness, especially in cases of AMD and diabetes."***
> **DR. TONG**

While a needle to the eye can sound daunting, Dr. Tong informs us that most patients leave the office after their first injection relieved that the procedure was really only a minor one. *"Everybody comes in anxious about doing the injection, but once they start seeing the benefit they are encouraged to continue if need be. Some people can tell the fluid is returning and come back early."*

Dr. Weisbrod mentions, *"It's amazing how well patients do on these treatments; it's really revolutionary. Although the primary goal is to reduce risk of further vision loss, vision improves significantly in many patients."*

Intravitreal injections have become commonplace in ophthalmology, even quickly becoming the most prevalent intraocular procedure worldwide. Common doesn't mean unimportant, however. What may seem routine to some is vision saving to others. *"In general, people can gain a lot of vision back if we catch it on time, and we can prevent blindness, especially in cases of AMD and diabetes,"* says Dr. Tong.

Uptown Eye provides patients with a variety of non-surgical retinal procedures and a group of ophthalmologists with a range of experience and training, including both medical and surgical retina specialists. Dr. Weisbrod concludes, *"Patients are in good hands here at Uptown."*

THE RISE OF COSMETICS IN A POST-PANDEMIC WORLD

INTRODUCING FOTONA 4D TREATMENT

The past year has brought about a lot of change. After two long years of online interactions and virtual happy hours, face to face interactions are reestablishing themselves as the norm. Consequently, renewed interest in cosmetic procedures has skyrocketed. Before the start of the pandemic, offices saw high demand for facial cosmetic procedures, but this quickly fatigued as we got used to our solitary lifestyles. However, as the masks come off, cosmetic procedures are seeing a renewed interest. Hina Kazimi, a Medical Aesthetician at U Eye Laser Cosmetic (UELC), speaks with us about this influx and her experience in the field. *"With the world moving outdoors, the much-awaited family reunions, coffee with friends, and in-person celebrations of our various milestones are making a return. People have begun to realize that looking good promotes feeling good. Along with staying cautious and safe, everyone is eager to get back to as much normalcy as we can. As we emerged out of our homes following the peak of the pandemic, keeping in place all the safety precautions, the influx of patients has seen a steady increase,"* Ms. Kazimi tells us.

Some think the rise of Zoom meetings during the pandemic, a phenomenon called the Zoom Boom, has much to do with patient interest in cosmetics post-COVID. Ms. Kazimi notes the importance of video chatting on our renewed perspective of cosmetics, *"The Zoom Boom brought with it close-ups and a focus on our face. When in person, we do not look at each other as up close as we did during these virtual meetings. That zit that had to show up on the morning of a virtual/zoom reunion with friends or that fine line we had never noticed before was suddenly the center of our attention. Most of the time, we are our own biggest critics, and video chatting brought that aspect to the forefront. With in-person treatments paused because of lockdowns, virtual skincare consultations via zoom became common."*

Video communication isn't the only reason for a rise in procedures. Another common push factor is the return to regular interactions. Over a third of the working population has returned to a full-time office setting. Whether the interaction is going back into an office, seeing family at a celebration, or something as seemingly inconsequential as getting groceries at the store rather than delivery, it can be challenging to adapt.

> ***"The last few years have been an opportunity for self-reflection. Life is too short to not be the best version of ourselves."***
>
> **HINA KAZIMI**

> ***No one should regret giving themselves time. Give yourself permission to take the time to fill your own cup.***
>
> HINA KAZIMI

"It became evident that we are not designed to live socially distanced from our near and dear ones," Ms. Kazimi shares. *"As the world became communal again, the idea of taking care of ourselves and showing up as our best version became reinforced. Consequently, the interest in cosmetic treatments has witnessed a new high."*

The Fotona SP Dynamis machine used at the U Eye Laser Cosmetic Clinic performs a wide range of cosmetic procedures including laser hair removal, skin rejuvenation, skin resurfacing, skin tightening, acne treatments, pigment treatments, smooth eye treatments, and lip plumping treatments. *"Fotona 4D treatment is gaining immense popularity because of its effective and non-invasive face lifting effects,"* explains Ms. Kazimi. The success of non-invasive cosmetic procedures in a post-pandemic world makes sense. After a stringent few years of worrying deeply about our personal health and safety, we can finally begin to shift our mindset towards other ways to garner our sense of self. *"The last few years have been an opportunity for self-reflection,"* says Ms. Kazimi. *"Life is too short to not be the best version of ourselves."*

UELC personalizes care by working collaboratively with patients to customize a plan that suits their goals and aesthetics without sacrificing safety and medical expertise. The first step? A consultation with the team. *"Cosmetic laser treatments that we offer have been proven to be safe, non-invasive, and effective with no long-standing adverse effects. Being an international medical graduate, my background in medicine, along with ten years of experience in the medical aesthetics industry, adds to my clinical expertise and skills to safely deliver result-oriented medical aesthetic procedures. The initial consultation visit before the actual treatment ensures that the service provider is aware of your health history and to ascertain if you are a suitable candidate for these treatments,"* Hina Kazimi expresses. *"No one should regret giving themselves time. Give yourself permission to take the time to fill your own cup."*

DR. TAM PROVIDES A MORE COLORFUL WORLD FOR HIS PATIENT: CATARACT SURGERY SUCCESS

Yokan Persaud has always enjoyed the details of life. When he began to notice issues with his vision, even while wearing glasses, he consulted his doctor, who told him that he had cataracts. His doctor recommended visiting Dr. Tam at Uptown Eye Specialists due to the doctor's extensive expertise in cataract surgery. After a series of tests to determine that this was the proper procedure for him, Yokan was taken through his options to upgrade the procedure with advanced technology.

There are generally two upgrade considerations for patients undergoing cataract surgery: the lens implant and the surgical technique. Patients have the opportunity to see better by removing cataracts that are blocking their vision, but also to improve their lifestyle and reduce the burden of glasses for the activities they enjoy. Different lens implant technologies can improve the patient's ability to see without depending on glasses. Usually, this is a choice of seeing distance or seeing up close with monofocal lens implants. However, if a patient wants the convenience of seeing both near and far, a multifocal lens implant can help one achieve this. Due to its complex design, this type of lens implant has to be perfectly centered in the eye, and it is often recommended to use additional surgical technique upgrades for the best success.

Some of the technologies used for surgery can improve the accuracy of the lens placement and positioning in the eye. Specifically, the Refractive Laser Assisted Cataract Surgery (UltraView ReLACS™) completes several steps in the procedure. First, it makes automated incisions in the cornea, ensuring that the wounds are well constructed so that they don't add to any preexisting astigmatism. The laser also makes additional incisions on the cornea to make an oval cornea a bit more rounded. This improves the geometry of the eye to maximize the lens implant effect. The laser makes a well-centered opening into the capsule that holds the cataract, allowing the lens implant to center properly in the eye. Also, the laser will soften the cataract before removal, reducing the total energy required to complete the surgery. This helps improve vision recovery.

Refractive Image Guidance System (RIGS), another available technology, takes an image of the patient's eye prior to the surgery. The blood vessels on the white of the eye are recognized by the system so that the same image is then superimposed onto the eye during surgery. When the surgeon looks through the operating microscope, the images are synced to ensure that all the landmarks are aligned, which is used as a guide for critical steps of the procedure. Most importantly, it also ensures the lens implant is well centered and the axis of the implant is perfectly aligned.

After carefully examining the eye to ensure there are no significant diseases or dry eye problems, Dr. Tam considers the patient's lifestyle preferences. *"We have to have a frank discussion with the patient and understand their personality to make sure they have a good chance of adapting to the lens,"* says Dr. Tam. *"The lens implants that allow patients to see with convenience have a more complex design. It takes more time for their brain to adapt."*

Having worn glasses for the last decade, Yokan chose the multifocal lens to give him full range distance and near vision. Due to the greater demand for precision in surgery with this type of lens implant, Dr. Tam recommended technology upgrades to maximize accuracy. Yokan chose to add UltraView ReLACS™ and the Refractive Image Guidance System.

> ***"Imagine a brighter world, a more colorful world, being able to enjoy the things they used to enjoy."***
>
> **DR. TAM**

Dr. Tam notes, *"I think that especially for patients who are going for upgraded implants, they are making a big investment in their vision, so we want to use any adjunctive technology available to us to ensure that we do the perfect job the first time. It's even more important to apply these technologies for upgraded lens implants."*

Yokan received the procedure on one eye, followed a month later with his second eye. Yokan recovered well, and within the first week after surgery, he already saw well from far, midrange, and near as intended for this lens implant. Initially, patients can notice night glare and a halo around point sources of light, especially at night. *"In the beginning,"* explains Dr. Tam, *"Yokan was noticing quite a lot of these halo effects at night, but with his personality and some tips, he was able to adapt quite rapidly. Within about a month, he reported that the halo effect had reduced quite dramatically, and he was adapting very well."*

When asked what clearer vision meant to him, Yokan replied, *"It's everything, isn't it? I'm a visual learner. Without my vision, I'm kind of lost. I needed my eyes."*

Cataract surgery can seem quick and straightforward to a patient. However, what they might not see is the complexity on the backend that allows the surgery to appear so seamless. With over 20,000 ocular procedures performed, Dr. Tam utilizes the most advanced technology to provide quality, personalized care for his patients. *"My favorite part is when they come back for follow up, and they come with a big smile on their face and tell me, 'Doc, I haven't seen this clearly in so long, and I didn't even remember how bright and vivid colors are.' Their eyes brighten up, and their lives brighten up. This is the most encouraging thing for me, and it's fuel for me to continue to try to offer my service to more patients."*

Over time, coping with slow progressive vision loss is common, and most people don't even realize how good their vision can potentially be. *"Imagine a brighter world, a more colorful world, being able to enjoy the things they used to enjoy. Don't let the fear of a simple procedure prevent you from going for it,"* says Dr. Tam.

After a successful procedure, Yokan's wife is scheduled for her cataract surgery with Dr. Tam later this year.

GIVING BACK CLOSE TO HOME:

FORSEE CANADA - FROM SCHOLARSHIPS TO SERVING THE COMMUNITY

Since its inception, Uptown Eye has become a vital part of the community. Whether volunteering at a charitable event or providing necessary services to underserved populations, giving back is an essential aspect of compassionate care.

Dr. Fariba Nazemi, a comprehensive and pediatric ophthalmologist at Uptown Eye, has devoted her time to those in need since residency. One of the ways she stays involved is with The Foundation for Ocular Research & Surgical Eye Expeditions. FORSEE Canada, as it's referred to, presents research opportunities and graduate scholarships to those interested in the field of ocular health and ophthalmology. Along with this, they participate in Surgical Eye Expeditions. These trips are designed in collaboration with existing organizations locally and globally.

This year, FORSEE Canada granted a scholarship to Mariam Issa, a University of Toronto medical student. Mariam has always been interested in global health, but she didn't start her schooling thinking she'd do ophthalmology. After a transformative encounter with a patient experiencing visual impairment, she realized the practice combined the values she appreciated most: finesse and meticulous skill, hopeful patients, and the ability to positively impact people's quality of life.

During a core rotation with Uptown Eye, Dr. Somani saw Mariam's passion for working with homeless women in Toronto, and connected her with FORSEE Canada and their work with Adam House. *"I joined FORSEE Canada's mission to Adam House, and you could see how dedicated the doctors are to their patients and how grateful and loyal the patients are to the doctors,"* says Mariam.

Adam House arranges Toronto refugee claimants with housing, immigration assistance, and crucial connections in the community. The goal is not only to survive in their new home but to thrive. One of these essential community connections, FORSEE Canada, provides eye clinics for Adam House


DR. NAZEMI


MARIAM ISSA

> ***To be part of that harmony, I felt honored. To do that in a context where you're impacting patients that don't have access to eye care otherwise, that meant a lot to me, especially because my mom came as a refugee. To see the barriers to care that she experienced and ways it impacted others, it's something I'm very passionate about.*** **MIRIAM**

residents in their own homes and on their schedule, usually visiting in the evenings. Lucy Chaimiti, the Executive Director of Adam House, recounts the importance of outside engagement in her work. *"Community involvement, such as FORSEE Canada, helps our clients feel welcome and removes barriers in accessing services. We have intentionally involved community in our weekly programming so that refugees can meet Canadians, and Canadians can meet refugees! When organizations, such as FORSEE Canada, come to Adam House to provide services, it shows refugees how deeply the community cares for them."* By administering necessary assistance, FORSEE can catch early symptoms that may need additional care but also assist in day-to-day treatment, such as arranging for a child's eyeglasses.

"To be part of that harmony, I felt honored. To do that in a context where you're impacting patients that don't have access to eye care otherwise, that meant a lot to me, especially because my mom came as a refugee. To see the barriers to care that she experienced and ways it impacted others, it's something I'm very passionate about."

Mariam's interest in refugee health and vulnerable populations as it relates to ophthalmology led her to be awarded the FORSEE scholarship for social eye care this past year, where she will join the team in Uganda. She was thrilled to receive this award. *"I was so excited and felt very honored to be able to continue the work that I deeply love with the support of the scholarship that would allow me to afford to go to Uganda, and to have that support that someone believes in you; it means a lot."* This Surgical Eye Expedition leaves in October with Dr. Nazemi and other ophthalmologists from Uptown Eye accompanying. In Uganda, they will offer essential care and education.

With graduation looming, Mariam is hoping to get into ophthalmology and continue her work with disadvantaged populations through FORSEE Canada. During her time with Adam House, Mariam, Dr. Nazemi, and the rest of the team discovered that the refugee population has 2.5 times more visual impairment than the general Canadian population. In the future, she plans to publish work related to these findings. Despite all her hard work and dedication, there's one main thing that Mariam wants to express to the world to describe her time with Uptown Eye and FORSEE Canada: *"gratitude."*

Something both Dr. Nazemi and Mariam have learned is the importance of giving back to your community, no matter how you define it. Dr. Nazemi has spent her career assisting those in need globally, locally, or wherever she's called. *"People are very appreciative of what we can provide them,"* says Dr. Nazemi. *"I found that people all around are the same. We all appreciate someone helping. That's a valuable lesson I learned."* Her treasured experiences have allowed her to share this passion with future ophthalmologists like Mariam, and both women are committed to continuing their work for years to come.

Uptown Eye Specialists are proud supporters of FORSEE Canada (The Foundation for Ocular Research & Surgical Eye Expeditions)

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LIFE AFTER SCHOOL:

DR. LEUNG AND DR. TONG TRANSITION TO UPTOWN EYE

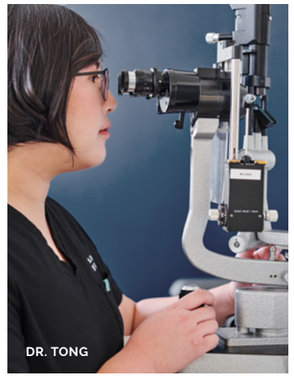
Due to the quality team of doctors, Uptown Eye is known for its vast wealth of expertise and variety of education. Within the past year, Uptown gained two additional faces: Dr. Victoria Leung and Dr. Lili Tong. After excelling in medical school, both doctors had the chance to bring their discipline to everyday practice.

After finishing her undergraduate degree at Brown University, Dr. Leung completed medical schooling at the University of Toronto. It was here she learned she wanted to pursue ophthalmology. Working in the field and expanding her knowledge through electives made the next steps clear. Dr. Leung went on to conclude her residency in ophthalmology at the University of Toronto, followed by subspecialty training in oculoplastic and orbital surgery at the University of Montreal. Shortly after, she started at Uptown Eye.

"The surgery is very unique and unlike any other field of medicine. Operating inside and around the eye, I like the intellectual and technical challenge of that," shares Dr. Leung.

Dr. Tong attended the University of Toronto for undergraduate studies and continued to the Michael G. DeGroote School of Medicine at McMaster University to complete her medical degree.


DR. LEUNG


DR. TONG

> ***"It's a collaborative group, very forward-thinking and efficient, lots of variety in clinical expertise. It feels supportive and cohesive, so we are able to put patients first."*** **DR. LEUNG**

"You can restore a lot of function. If you ask someone what sense they least want to give up, it's probably sight. Hearing a patient say that they can see, it's so rewarding. **DR. TONG**

After finishing her residency at the University of Toronto, Dr. Tong joined Uptown Eye as a general ophthalmologist.

"I'm a general ophthalmologist, so I do a bit of everything. There're a lot of retina problems, so I end up doing a lot of medical retina. There's a need for pediatrics, so I take care of the little ones. Of course, I take care of cataracts and glaucoma. It's nice to tailor my practice to what the community needs," Dr. Tong expresses.

Attracting both doctors to ophthalmology was the expansive nature of practice. It can be technical and surgical, but it's also a field that allows for long-term patient relationships. Being able to help patients at large volumes, with high levels of patient satisfaction, is part of what makes ophthalmology distinctive. That's not the only thing that attracts medical students to ophthalmology, however. Dr. Tong offers her unique introduction to the eye, *"I love eyeballs. I went into university, and they had a study where they would take a picture of your eye. I looked at all the details and thought it was gorgeous. I went to medical school and couldn't get away from the eyes and ended up in ophthalmology."*

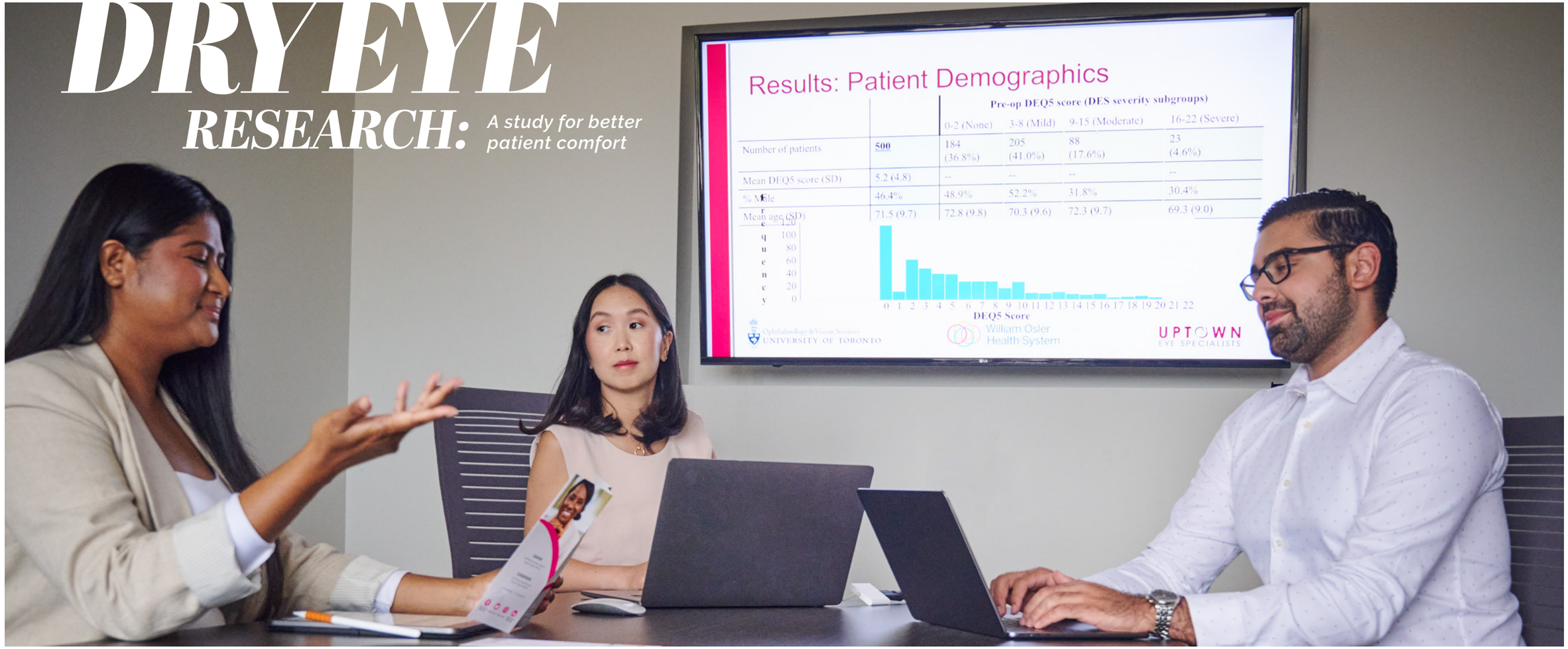
Along with their exceptional quality of medicine and widespread education, Dr. Leung and Dr. Tong offer fresh eyes to the constant innovation that ophthalmology brings. Medical school and residency prepare future doctors for success in practice; putting the training to the test with higher volumes is new but not foreign. Nonetheless, the transition from medical school to practice can be daunting. Luckily, both doctors found first-rate support along the way.

"It's a collaborative group, very forward-thinking and efficient, lots of variety in clinical expertise. It feels supportive and cohesive, so we are able to put patients first," says Dr. Leung. *"As a resident, I had a chance to find a good fit for myself, and the group here is great to work with. They have all been super supportive, especially as I transitioned to practice. At the end of residency, you think you know everything, but it's different when you're on your own. Having someone saying yes, that's the right thing to do is really helpful. It's a very collegial group,"* says Dr. Tong.

Receiving considerable accolades during residency, both doctors offer the community extensive ability and excellent caliber of care. Dr. Leung offers her skill in cataract surgery, eyelid, and orbital surgery. Dr. Tong provides medical, laser, and surgical treatment for various eye conditions, including glaucoma, cataracts, and retinal diseases.

DRY EYE RESEARCH:

A study for better patient comfort

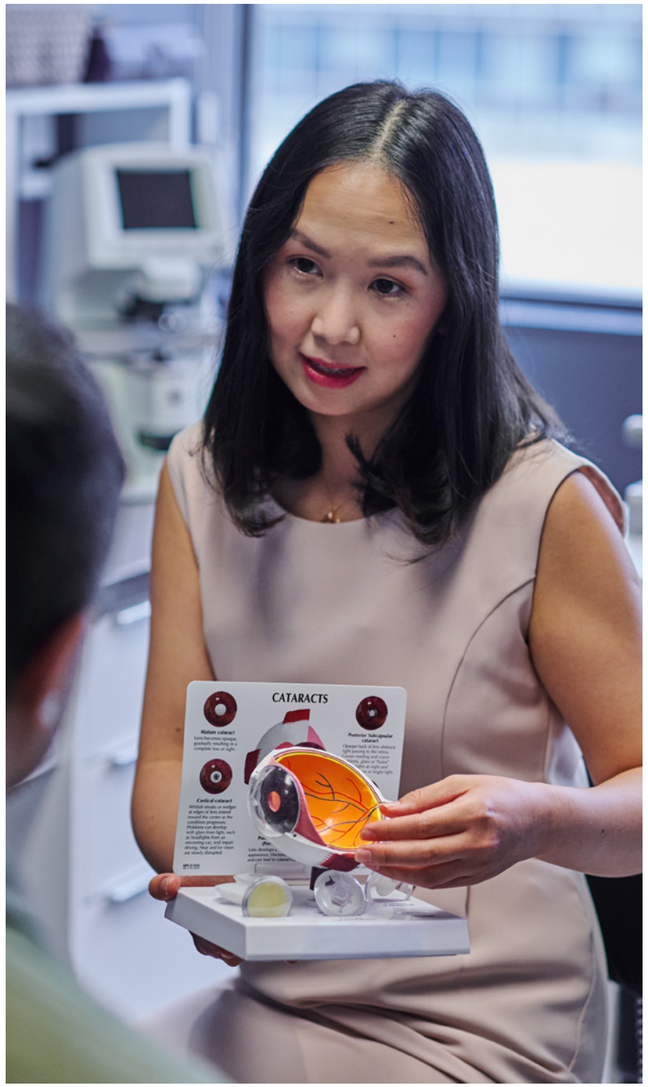


When you can not create enough tears or have poor tear quality, your eyes are not properly lubricated and can become irritated. This condition is known as dry eye disease and affects about 30% of Canadians. It's also one of the most undertreated areas in ophthalmology. Uptown Eye Specialists opened the Dry Eye Clinic as part of the UELC to focus on diagnosing and treating dry eye.

Dr. Hannah Chiu, a comprehensive ophthalmologist at Uptown Eye Specialists, led a project this year centered on the incidence of dry eye disease in patients undergoing cataract surgery. After observing that patients were returning to the office after cataract surgery with concerns relating to dry eye, Dr. Chiu and her team conducted a research study into its incidence and risk factors. The ultimate goal of this project was to see what factors affected post-operative dry eye symptoms. *"Before undergoing surgery, we gave patients a standardized and validated questionnaire to assess their dry eyes. Afterward, we studied to see how many patients developed concerns related to dry eyes and returned to the clinic for further follow-up as a result of that,"* Dr. Chiu explains.

Rutmila Uddin, an Ophthalmic Technician and a member of the research team, assesses patients before and after cataract surgery. *"Usually, when patients come in for cataract surgery, there's always a chance they may already have dry eyes but are unaware of it. Additionally, during the procedure, we are in direct contact with the eyes. These factors, among others, can lead patients to encounter dry eyes post-operatively,"* she says.

Once a week, the project team met to discuss their findings, challenges, and ways to improve patient care based on the results of the research. After assessing 1,000 patients, it was found that 1 in 5 patients experienced dry eyes after surgery requiring follow-up care. Additionally, at baseline, a lot of patients already had dry eyes. If that's not recognized and treated beforehand, after cataract surgery, it can become worse and can affect healing and patient satisfaction. This information allowed the team at Uptown Eye Specialists and UELC to better optimize patient care. Rutmila, who works closely with patients, was able to implement the study findings into her day-to-day work. *"The work I do helped guide the research, and the research helped me better understand the work I do and how to correlate it*



practically. It was a good balance to understand both sides," expresses Rutmila. Each patient is assessed for dry eye and fills in a dry eye questionnaire prior to surgery. The assessment allows the team to see if the patient has mild, moderate, or severe dry eye. If a patient has severe dry eye before their cataract procedure, it's essential that their tear film is optimized and the dry eye is treated appropriately, including topical or interventional treatments. This evaluation can also serve to educate patients.

"Helping patients understand before surgery what dry eye is, what kind of symptoms they might have after, can really help with their postoperative comfort. When patients dry eyes are treated prior to surgery, it makes the outcome better," conveys Dr. Chiu.

Dr. Chiu was assisted in her research by two medical students: Amin Hatamnejad, a second-year student at McMaster University, and Saffire Krance, a third-year student at the University of Western Ontario. Both students have been vital in the actualization of the project and noted their personal interest in the topic of dry eye.

"I had the pleasure of being involved in extracting the data and looking at the findings," remarks Amin. Saffire adds, *"Understanding how prevalent it really is after cataract surgery, and ways in which we can mitigate risk for patients can be hugely impactful on so many*

> ***"When patients dry eyes are treated prior to surgery, it makes the outcome better.*** **DR. CHIU**

> ***"Patients see the results; no pun intended. There's a direct result that can be shared between the surgeon and the patient, and that's really meaningful to me and the best part of what I get to do.*** **DR. CHIU**


RUTMILA UDDIN


SAFFIRE KRANCE


AMIN HATAMNEJAD

individuals' quality of life." For Amin and Saffire, seeing the satisfaction from patients is what continues to draw them into the field of ophthalmology. Along with this, the mentorship and guidance of Dr. Chiu and the rest of the group at Uptown have allowed them to feel confident in their direction. Amin hopes to apply for ophthalmology residency programs and continue his growth with the doctors at Uptown Eye Specialists. Saffire, a former FORSEE scholarship awardee, is currently in the midst of her residency applications and is excited to move forward with the next chapter of patient care, clinical work, and research.

"The whole point of research is to figure out how to improve patient outcomes; that's the most important thing. It's nice to see through a medical student's eyes and watch them arrive at findings that will help change our practice and improve things for patients afterward," says Dr. Chiu.

The Dry Eye Clinic, as part of the UELC, provides a multi-specialty approach to individualized dry eye management. The diagnostic tools that Dr. Chiu and her team created through this research project have been implemented into daily use, allowing for improved patient comfort post-operatively.

"Patients see the results; no pun intended. There's a direct result that can be shared between the surgeon and the patient, and that's really meaningful to me and the best part of what I get to do," remarks Dr. Chiu.

“It’s very exciting that we have these new treatment options for patients to take advantage of...

DR. LAM

CREATING A BETTER POST-OPERATIVE EXPERIENCE

Cataracts and glaucoma are two of the most common ocular diseases and often coexist in patients. The introduction of micro-invasive glaucoma surgery (MIGS) devices was revolutionary in the treatment of these diseases. MIGS allows physicians to offer two surgical therapies in one procedure by creating a single incision. Other standard glaucoma surgeries, such as trabeculectomy, present a higher risk profile for a patient with a more intensive post-operative experience. While there’s always a place for this, often it’s reserved for patients with advanced glaucoma, whereas one benefit of MIGS is that it can be provided to patients at an earlier time point.

By offering the ability to complete cataract and glaucoma in one combined procedure, MIGS reduces intraocular pressure (IOP) while also removing the cataract and slowing glaucoma progression. As a result, patients can reduce their dependence on medication, improve recovery time, and achieve longstanding IOP control.

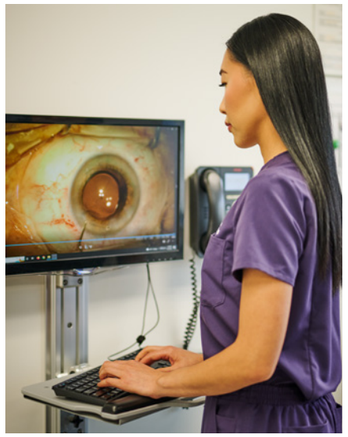
Dr. Kay Lam is an ophthalmologist at Uptown Eye with subspecialty expertise in glaucoma and cataract management. She shares how MIGS has changed her practice.

“The goal is to offer patients with both these diseases better quality of life by reducing their dependency on medications like eye drops, to achieve better long-term control of their eye pressure, and also prevent or slow the progression of glaucoma.”

Dr. Lam considers several elements in determining if a patient could benefit from MIGS rather than a solo procedure: the risk profile, indications and contraindications of each MIGS modality, ocular anatomy, and other systemic aspects. *“I don’t make the same recommendation for each patient,”* says Dr. Lam. *“In certain patients, cataract surgery alone can effectively treat intraocular pressure. For each patient, I consider the factors in determining if adding this glaucoma procedure is appropriate at the same time as cataract surgery.”*

Some MIGS procedures present good safety profiles but moderate effects in lowering IOP. Other surgeries may be more effective but have a higher risk profile and longer post-operative recovery time. Additionally, the patient’s anatomy can significantly affect their surgery. Dr. Lam examines the patient’s ocular anatomy and their ability to position in the operating room so she can sufficiently access the proper angle in their eye. Systematically, if a patient were on blood thinners, for example, there is a greater risk of bleeding during and after the procedure. *“It’s a very individualized consideration for each patient and a very individualized recommendation,”* Dr. Lam shares.

In recent years, MIGS has become more accessible to ophthalmologists as it continues to be refined for a better patient experience. *“It’s very exciting that we have these new treatment options for patients to take advantage of, such as faster recovery and the possibility to better affect their intraocular pressure with higher safety profiles for surgical intervention,”* conveys Dr. Lam. *“That’s the exciting space that MIGS opens up for my patients with both cataract and glaucoma.”*



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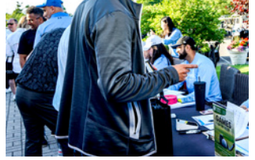
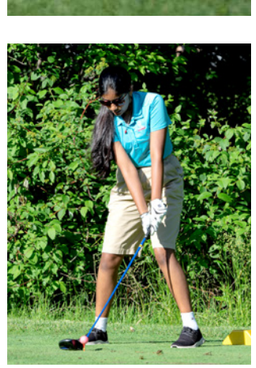
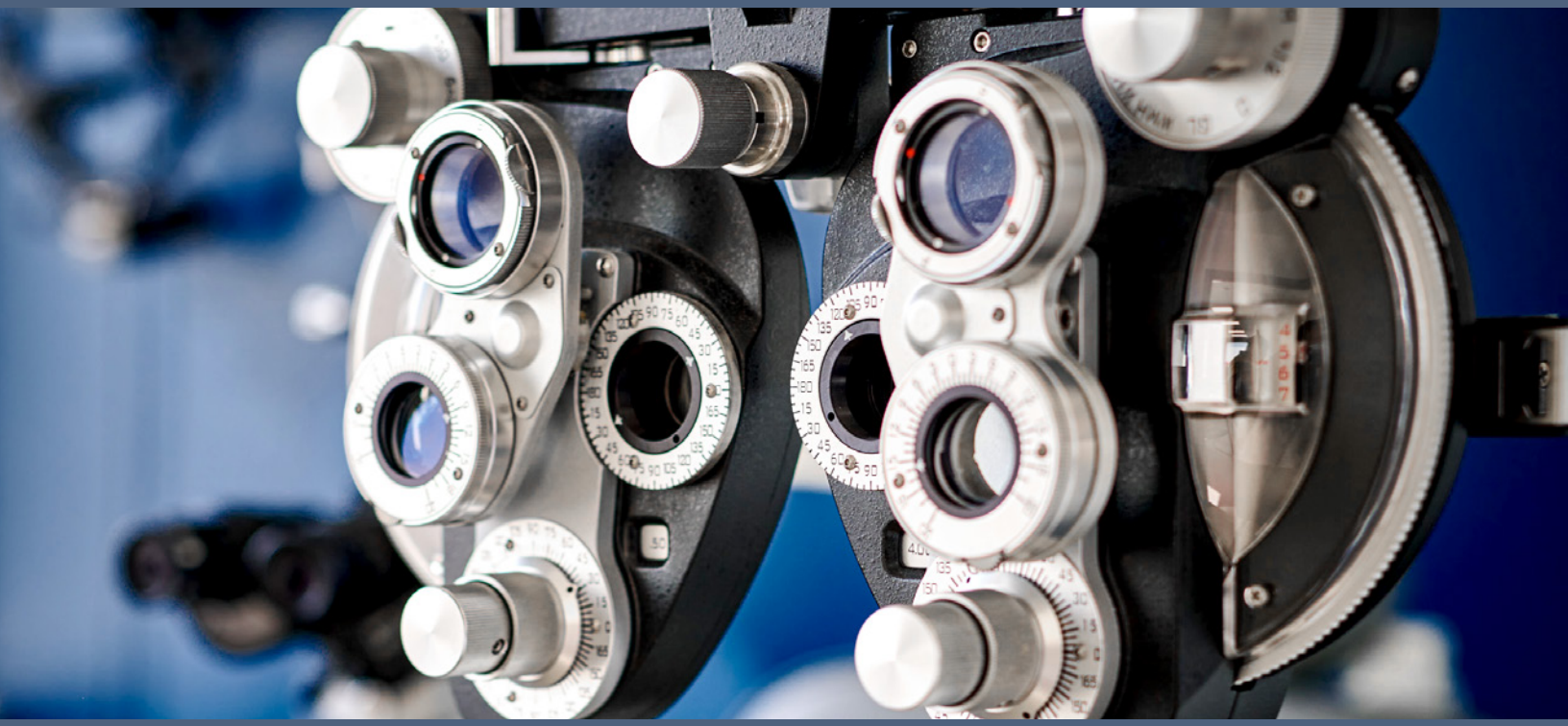




United focus towards Universal vision.



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