



September 2024

COS Newsletter



Dr Harshita Dhokania,
JR, AEC, PGIMER



**tête-à-tête
with
Prof Vishali Gupta**

**Genetics in
ophthalmology**

**New
TSFIOL
techniques**

**Gallery &
many more...**





President's address

Dear Esteemed Members,

As we come together for the 35th Annual Conference of the Chandigarh Ophthalmological Society in collaboration with the North Zone Ophthalmological Society, it is with immense pride and excitement that I present the new edition of our COS newsletter!

In this issue, we have a special feature on Prof. Vishali Gupta, a distinguished figure in the field of research who has been instrumental in taking the PGIMER Advanced Eye Centre to new heights. Her insights, achievements, and groundbreaking contributions continue to inspire us all.

This comprehensive edition also includes thought-provoking commentary, case summaries, and innovative techniques that are pushing the boundaries of ophthalmology. Beyond our professional pursuits, we explore the hobbies and passions that enrich our lives outside of the operating rooms and clinics. From breathtaking paintings to stunning photographs, these creative expressions offer a unique glimpse into the diverse talents and multifaceted personalities that make up our vibrant community.

Furthermore, the patient chronicles featured in this newsletter remind us of the empathy and compassion that are at the heart of our profession. They highlight the profound impact we have beyond the realms of diagnosis and treatment — the human connections that define our purpose and fuel our unwavering commitment to our patients.

I extend my heartfelt gratitude to all the contributors, editors, and everyone involved in curating this edition. Your dedication and passion have brought to life a newsletter that truly embodies the spirit and values of our society.

With warm regards,

Prof. Amit Gupta

President, Chandigarh Ophthalmological Society



Message from the Secretary's Desk

We are excited to share the latest updates from "our" Chandigarh Ophthalmic Society!

As we approach the end of another productive year, this would be the perfect time to reflect on how far we have come. We are thrilled to share some glimpses from the past year, some 'beyond ophthalmology' musings of our dear members and some precious pearls of scientific wisdom.

We are happy to release this newsletter at our 35th Annual conference which is taking place jointly with the 36th Annual conference of the North Zone Ophthalmological Society, where leading experts will present cutting-edge research and innovative practices. Engagement with peers, contributing to the vibrant discussions and creating new memories over the siesta night are on the cards.

A very special shoutout to Dr Sonam Yangzes for her efforts in carefully crafting this newsletter. The newsletter's engaging content and polished presentation are a testament to her hard work and expertise.

I thank you all on behalf of the entire Executive for your unwavering dedication to advancing eye care. Your involvement and passion are what make our society vibrant and effective. We look forward to continuing this journey together and achieving even greater milestones in the coming year.

Warmest regards and best wishes,

Dr. Parul Ichhpujani

AICE

COMFORTZ AICE DROPS

Feel the Hydranaline Rush

Instant comfort on instillation

Sodium Hyaluronate Eye Drops 0.25%
COMFORTZ AICE

Only for the use of registered medical practitioners, hospital/laboratory

AICE Health Care Pvt. Ltd. #363 19th Main Road, 1st Block Rajaji Nagar, Bangalore-560010



Face To Face With Prof. Vishali Gupta

In the world of ophthalmology, where scientific rigor meets compassionate care, there are few individuals who stand out like our guest today. A distinguished surgeon and researcher, she ranks among the top 2% of scientists worldwide, according to Stanford University, and serves as the President of the International Uveitis Study Group. But to her students at PGI, she is more than just an accomplished professional — she is a mentor who inspires them daily, a leader whose approachability makes everyone feel at ease, and a guide who never hesitates to share a meal or a moment with those she teaches. **Her journey is a testament to excellence in research, leadership, and education, and today we delve into the story of her remarkable career.**



Q: Can you share a bit about your journey in the early years and what drew you into the field of ophthalmology, particularly uveitis?

A: Initially, I had no intention of pursuing ophthalmology; I was more inclined towards internal medicine. My husband and I moved from Jammu to Chandigarh, where he got a research job with Dr. Saini. While preparing for my entrance exams, I sought a research job and was introduced to Prof. Amod Gupta through Mr. Saini. I began working on a project related to diabetic retinopathy, and within a few days of working with Prof. Gupta, I became fascinated by the fundus images and the study of uveitis. This experience shifted my perspective, leading me to pursue ophthalmology as a specialization.

Q: In the early stages of your career, how did you manage the demands of clinical practice while pursuing your interest in research? What were the most significant obstacles you faced in balancing the heavy clinical load with your research work?

A: During my early career, the clinical load was not as heavy as it is today. The department was smaller and more cohesive, with everyone

working as a team and supporting each other. This environment allowed us to have some personal time, which I utilized to engage in research, largely due to the encouragement of Prof. Gupta. Most of the research work was done in the evenings or on weekends, but it never felt burdensome. Prof. Gupta made the research feel like a natural and enjoyable part of our work, not an additional task. I even have fond memories of reviewing angiograms during winter nights with my daughter by my side. The mentorship I received was so effective that I never felt stressed or overburdened by the dual demands of clinical practice and research.

Q: How important do you think having a mentor is in a field of specialization, and what is the ideal role of a mentor and a mentee?

A: A mentor is crucial, akin to water for a seed after it has been planted. Without regular care, the seed (or a young professional) might grow, but with a mentor's guidance—like regular watering and care—the growth is quicker, healthier, and more well-crafted. A mentor helps shape you to be presentable to the world, making it very important to have one early in your career.

Q: How did you manage work-life balance during the early stages of your career, especially with a young child?

A: My daughter was born before I joined my residency, so we kind of grew up together. There were times when I would come home late after emergencies, and she would be waiting for me. It was challenging, but I involved her in my work, so she felt like a part of it. She knew my colleagues and would even accompany me to meetings. This made it easier for me to balance work and family life.

As she grew up, she understood the importance of my work, and she never felt neglected. However, it's crucial to prioritize and sometimes seek help from family. For example, I had the support of my in-laws, which was essential. I believe that while it's important to prioritize your career, you should not neglect your family. A balance needs to be found, and that balance will vary from person to person. You need a long-term strategy that works for you, where neither your career nor your family is neglected.

Q: You mentioned enjoying the process of balancing clinical work and research. However, do you believe there are significant challenges for a researcher, particularly in India?

A: Yes, there are challenges, especially for researchers who try to work alone. Research is a team effort, and building a strong, collaborative team is crucial. Each team member brings unique strengths, and by working together, the team can overcome challenges more effectively. A good mentor once taught me to focus on one or two areas of research and follow them consistently. Research should be a continuous journey with a clear long-term objective, not just a series of disconnected projects. Publications should be milestones that lead towards your final goal, not distractions that delay or derail your progress. For successful research, it's essential to brainstorm with your team before writing projects, ensuring that everyone's expertise is utilized. Once you secure funding, hire competent people rather than just those who are available, and set small, achievable goals to build towards making a significant impact in the end.

Q: Ma'am, you hold a patent related to intraocular tuberculosis. Could you tell us more about this innovation and what it means to you?

A: The journey of this innovation began back in 1993-94 when ocular TB was not being diagnosed effectively. At that time, a report by Dr. Biswas from Shankara Netralaya highlighted cases where eyes were removed due to misdiagnosis, only to find out later that the underlying cause was mycobacterium TB. This revelation made me question why a diagnosis couldn't be made without such drastic measures.

With the support of my mentor, Prof Amod Gupta, I began exploring the use of PCR (Polymerase Chain Reaction) to diagnose ocular TB. We started taking samples and developed the PCR tests gradually. In 1997, we published our first paper on PCR TB, but it faced rejection from many journals because the concept was new and not widely accepted. Eventually, we managed to get it published, and that marked the beginning of defining clinical manifestations of TB using PCR.

Over time, we identified that TB could present itself in various ways, such as vasculitis and serpiginous choroiditis, which were previously considered autoimmune conditions. By treating these conditions with anti-TB therapy, we saw a significant reduction in recurrences.

This work has been a continuous journey for me, evolving from the early days of PCR testing to global collaborative studies like the Collaborative Ocular TB Study (COTS). Despite facing numerous challenges, including financial constraints, we managed to bring together 25 centers worldwide, contributing data without any monetary incentives. This project has now become a gold standard for ocular TB diagnosis and treatment, even leading to the development of an app that guides treatment decisions.

Finally, the Indian Council of Medical Research (ICMR) recognized our work and invited us to develop official guidelines. This journey, despite its challenges and criticisms, taught me the importance of perseverance and the value of turning rejection into something bigger. The criticism I faced along the way only motivated me to push harder and contribute more significantly to the field.



Q: Ma'am, as the current president of the International Uveitis Study Group (IUSG), could you share your journey towards this milestone?

A: Becoming a member of the International Uveitis Study Group (IUSG) was a significant step in my career. My journey began around 2010-2011 when I first applied for membership. The process was rigorous: you had to meet certain criteria, make a presentation, and then the existing members would vote on your admission. I was nominated by Dr. Gupta and presented my work at one of the IUSG meetings in Paris.

After the presentation, while I was enjoying a moment on the Eiffel Tower with Dr. Gupta he gave me a piece of advice that stayed with me. He told me not to let the membership go to my head and to continue working diligently. At the time, I thought he was dampening my joy, but I later realized the importance of that advice.

Several years later, around 2022, I received a call from Salim in Mumbai informing me that I had been elected President of IUSG. It was a proud moment for me, but I also remembered Dr. Gupta's advice. When I visited him, he reminded me not to let the position change my approach to work. His words were a reminder to stay grounded and focused.

Q: Could you also tell us about your recognition among the top 2% of world scientists by Stanford University?

A: Being recognized as one of the top 2% of world scientists by Stanford University was an unexpected honor. It reflects the impact of the work I've been involved in, particularly in the field of uveitis and ocular tuberculosis. This recognition is not just a personal achievement but also a testament to the collaborative efforts of my team and the support I've received from mentors and colleagues throughout my career.

Both these milestones—the presidency of IUSG and the Stanford recognition—are reminders of the importance of continuous hard work, collaboration, and humility. They motivate me to keep pushing the boundaries of research and contribute meaningfully to the field of ophthalmology.

Q: You mentioned that you do not let work define you and have found happiness in other areas. Could you elaborate on that?

A: Absolutely. For me, work is a part of my life but not the entirety of it. I've made it a rule not to bring work home, especially in recent years. I cherish my time at home, enjoying simple pleasures like sitting in the lawn and cooking, activities that help me unwind and reconnect with myself. My involvement in projects like the IUSG multimodal imaging project is important, but I balance this with personal time and avoid letting professional achievements define my self-worth.

I find immense satisfaction in engaging with and educating underprivileged children. There's a profound sense of fulfillment that comes from making a difference in their lives. Whether I'm giving an oration or spending time with these children, I find that the latter brings me more joy. It's the human connections and the impact on others that truly matter to me.

Q: How do you see your role evolving as a senior professional?

A: As a senior professional, I believe it's crucial to mentor and support younger colleagues. I focus on guiding them, helping them grow, and allowing them to take on clinical loads and responsibilities. My role should be about contributing to broader goals, such as developing guidelines and driving systemic improvements. I find it more valuable to work on high-impact projects and reforms rather than getting caught up in routine tasks. This approach ensures that I'm contributing in ways that leverage my experience and expertise while enabling younger professionals to shine.

Q: Ma'am, you are an inspiration to young ophthalmologists, especially women. What do you believe are the most important qualities or skills that a young ophthalmologist should cultivate to succeed in both their clinical and research careers?

A: Thank you for your kind words. First and foremost, I believe it's important not to play the "woman card." Once you've entered the profession, it should be about your abilities, not

your gender. Avoid using your role as a woman as an excuse to take unnecessary leaves or shirk responsibilities. If you genuinely need time off, plan it in advance, communicate with your head, and make alternative arrangements for your patients. This shows commitment and professionalism.

Secondly, recognize that society often demands more from women. You may have to work harder—double, triple, or even quadruple the effort—to be on par with your male counterparts. Instead of resenting this, find a way to manage it. Understand that societal norms may not change overnight, so it's more productive to find a system that works for you. Don't let the extra effort discourage you; instead, build a strong support system, whether it's through hiring help or relying on family.

Another key point is visibility. Although I personally dislike attending dinners or networking events, I learned the importance of being present and meeting people. If travel is necessary, find ways to integrate your personal life with your professional commitments. For instance, consider bringing your husband or another family member along to conferences. This way, you can maintain a balance between work and home.

Lastly, understand that everyone's situation is unique. What works for someone else may not work for you, and that's okay. Don't feel guilty if you need to slow down at certain times, like I did when my daughter was in 11th and 12th grade. It's essential to prioritize what's important at different stages of life and remember that you can always bounce back.

In today's world, technology offers more flexibility, so use it wisely. But don't let it become a distraction. Spend quality time with your family, engage with your children, and make sure that your relaxation time truly refreshes you. When it comes to research, only pursue it if it genuinely interests you. Don't feel pressured by what others are doing; find your own path and move forward at your own pace.

Pearls for Upcoming Researchers:

Focus and Continuity: Research should not be about jumping from one project to another. Instead, identify one or two key areas of interest and maintain continuity in your work. Set a long-term objective and break it down into short-term goals and milestones. Each publication should be a step towards your final destination, not a diversion.

Build a Strong Team: Research is a collaborative effort. Assemble a team where each member brings unique strengths. Whether you're working with other clinicians, specialists, or bio-scientists, a strong, complementary team is crucial for successful research.

Brainstorm and Plan Together: Before writing a project, brainstorm with your co-investigators to ensure the project is well-rounded and feasible. This collaborative approach increases the chances of your project being accepted and funded.

Hire Competent People: When you secure funding, prioritize hiring skilled and competent individuals who will contribute effectively to the project. Avoid hiring based on availability or connections, as this can hinder progress.

Start Small: Begin with achievable, straightforward research questions. Focus on one simple question and one clear answer. Over time, these small steps will contribute to significant progress and impact in your research field.



Prof. Vishali sharing a light moment with Dr Sonam





Malhotra's Indigenous SFIOL Technique: Tips and tricks explained



Dr. Pawan Puneet Malhotra
Dr. Gurmeet Singh (HOD)
Dr. Amanpreet Kaur

Deptt of Ophthalmology, SGHS Multispeciality Sohana hospital, Punjab.

Insufficient or absent capsular support resulting in aphakia may be spontaneous or consequence of a complicated cataract surgery, trauma, or pseudoexfoliation syndrome. Many sutureless intrascleral IOL fixation techniques have become popular and accepted worldwide with several advantages over conventional transscleral suturing of the IOL.

Insufficient or absent capsular support resulting in aphakia may be spontaneous or consequence of a complicated cataract surgery, trauma, or pseudoexfoliation syndrome. Many sutureless intrascleral IOL fixation techniques have become popular and accepted worldwide with several advantages over conventional transscleral suturing of the IOL.

AMERICAN ACADEMY OF OPHTHALMOLOGY®
JAN 03, 2024
Malhotra's Indigenous SFIOL Technique: No Forceps, No Suture, and No Glue
By Pawan Puneet Malhotra, MBBS, MS, Gurmeet S. Mangat, MD, Amanpreet Kaur
Most Commented
1. Malhotra's Indigenous SFIOL Technique: No Forceps, No Suture, and No Glue
2. Introduction to Retinal Optical Coherence Tomography (OCT) Interpretation
3. Peripheral Iridotomy With a 22G Needle

BENEFITS OF TECHNIQUE

- NO FORCEPS
- NO GLUE
- NO HAPTIC EXPOSURE
- NO HYDROPHILIC IOL
- NO SUTURE
- 3.2 MM CLEAR CORNEAL INCISION

We here by share few recommendation pointers that should be considered while performing this technique:

#1 Accurate Marking- While deciding for location of scleral pockets, measure the vertical corneal diameter with Castroviejo calliper, halfen it to mark the centre of cornea and accordingly mark site of scleral pockets. Exact marking of scleral pockets location and haptic exteriorization point(1.5mm) are extremely important to avoid any IOL tilt as can be seen in the video. (https://youtu.be/mT7dFaE5p4I?si=0qPI7yRn_MukDtG5)

#2 Scleral Pocket Formation- Avoid the sites of previous ports in case of vitrectomised eyes and for such cases, one can opt for superonasal and inferotemporal located scleral pockets. Accordingly also shift the main entry to superotemporal location for easy delivery of 26 G needle. Avoid heavy cautery on the scleral pocket sites to save of anterior segment ischemia especially, if choosing the equatorial plane of 0-180 degree axis. One can either use 2.1 -2.6 mm Crescent (Appasamy) or 1.8 mm Keratome (Bioflex) also to

Picture 3



make the scleral pockets as can be seen in Pic 3a. While making pockets, take care inner end of the blade does not cut through the angle of anterior chamber to yield blood in anterior chamber. Other option is to mark 1.5mm entry mark first and then make the pockets considering that mark as centre. By this, edge of crescent or keratome will be away from the angle and would not cut through the angle of anterior chamber.

#3 Needle-Retainer Assembly- Bend the 26 G needle close to hub only and to 60-70 degrees. Secondly, if silicon band segment as seen in Picture 3b, is not available one can use silicon bolster or slider of the Iris hooks too.

#4 Main Entry- For corneal entry, start practicing with slightly larger entry to adapt well with haptic manipulation especially for the trailing one and gradually reduce it to 3.2mm. Surgeons well versed with SICS tunnel can use that too.

#5 Intraocular Lens- We prefer Alcon Ma60 AC or Aurovue Multipiece Preloaded IOL for this technique. Using IOL injector assembly is easy with Aurovue as assembly is lighter than titanium injector of Alcon where one can use holder folder forceps or curved tying forceps. While planning to

use the injector system, deliver a part of leading haptic out of the cartridge to make that available for threading into 26G needle.

Picture 3: Various steps of the SFIOL surgery

#6 Haptic Threading And Needle Delivery- While bringing out needle, momentarily close the infusion source for a while and sweep the needle so that it does not pierce any iris or corneal tissue in its way out. Thread only upto 3-4 mm of haptic as seen in Pic 3c so that it's easy to unthread after retrieving that out and keep the needle from the other end which is then held at its palce with the aid silicon band segment as seen in Pic 3d.

#7 Trailing Haptic Insertion- For trailing haptic management, one must exchange hands for easy maneuverability by holding the syringe with left and thread the haptic with right hand. Take care to keep it at the extreme ipsilateral edge of main entry. While holding the haptic at tip with curved tying forceps, slide the haptic slightly back into eye and hold the anterior sleeve of scleral pocket with the one tooth forceps and slide it there in as seen in Pic 3e, obviating any chances of haptic exposure.

COMPARISON WITH OTHER SFIOL TECHNIQUES	
1. YAMANE'S	TRAILING HAPTIC INSERTION
2. AKREOS (SUTURED SFIOL)	SUTURE & RELATED COMPLICATIONS USE OF HYDROPHILIC LENS
3. AGGARWAL'S GLUED SFIOL	NEED OF TRAINED ASSISTANT MICROFORCEPS/ FIBRIN GLUE
4. CROSS KNIT	EXPOSED PART OF HAPTIC FOR USE OF GABOR SCHARIOTH SCLERAL POCKET AND SCLEROCORNEAL MAIN TUNNEL USE OF GABOR SCHARIOTH FORCEPS

Table : Table comparing difficulties in various newer SFIOL techniques

In addition to overcoming the hurdles in other techniques detailed above, our approach also makes it affordable for the needful by reducing the cost of surgery per case by ₹10000 as no glue, sutures or microforceps is required. Some of the newer techniques even require two microforceps at times as for handshake transfer of haptics. To conclude, it's easy to learn and adapt as most of the anterior segment surgeons too find all its manoeuvres simple and quick to acquire. Moreover, in developing country like ours, cost reduction of the surgery aids in optimal delivery of health care for the benefit of all.



IMPLANTABLE PHAKIC Contact Lens
The One Step Refractive Solution

World's Only Customized Phakic Lens

Innovative Solution for Myopia, Hyproopia & Presbyopia with Astigmatism correcton

Precise Cast Molded Hydrophobic MICAL



Magnificent
UHD
Ultra High Depth of Focus

EDOF

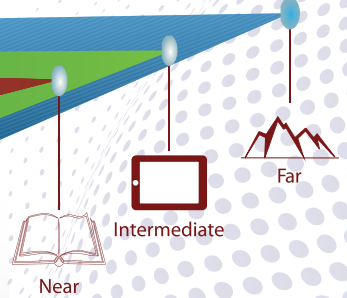
Magnificent
UHD Toric
Ultra High Depth of Focus



Dynamic Energy Transfer Optic



For Near, Intermediate & Distant Vision



www.caregroupiol.com



Paintings Gallery



Midnight Bloom



Dr. Khushdeep Abhaypal

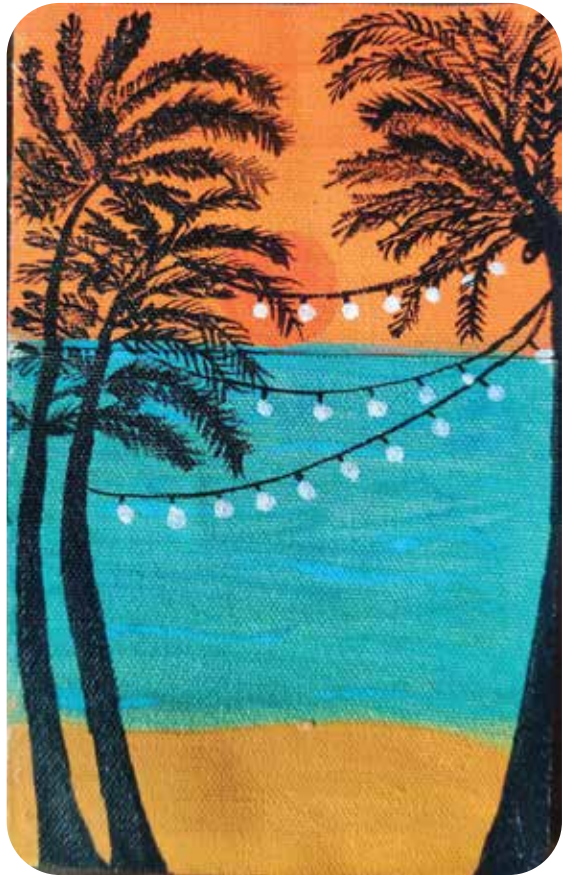
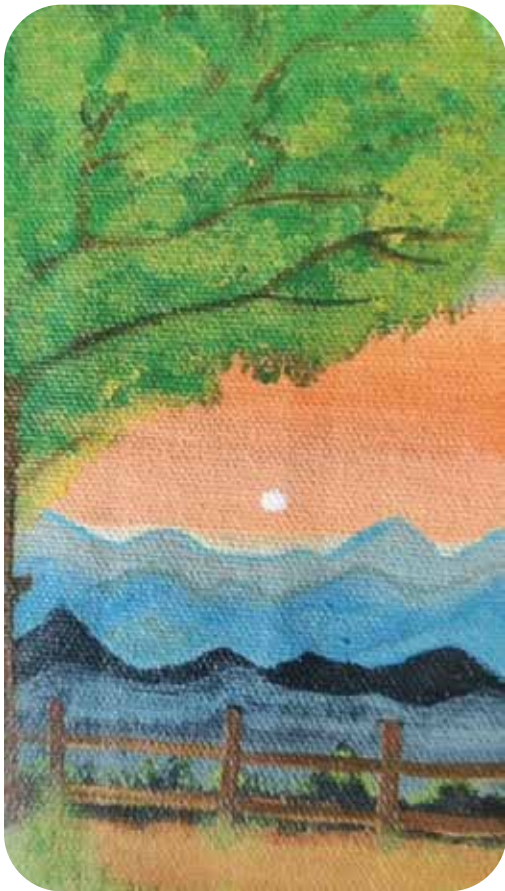
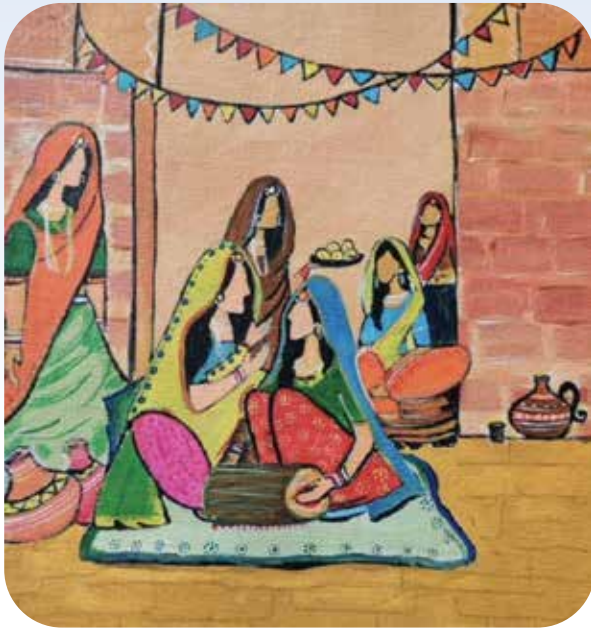
SR, Pediatric Ophthalmology and strabismus AEC, PGIMER



Dr. Irwinder Pal Singh

Chief Eye surgeon at,
DR. K.P's Eye Care Centre, Chandigarh
Specialisation : Anterior Segment,
Glaucoma and Medical retina





Dr Anandi

JR Ophthalmology
AEC, PGIMER



Dr Swathi J

JR , Ophthalmology AEC, PGIMER



LET IT BURN

Dr -Chitransha

JR, Ophthalmology AEC, PGIMER

Today, the sky turned crimson
As the blood spilled and our hearts weeped
There are howlings and screeching
For the screams unheard and the justice unserved
Black covers the white in our flag
Is this the independence we lagged?

Humanity turned blindsided by the so called politicians Who says "we are united"

So, let this sky bleed red and burn like our souls for the Justice denied
This land was already hell, let it boil for a while
Let's agitate, let's ignite and rise like phoenix
Then no other nirbhaya or abhaya will ever run for her Life





Genetic testing in Ophthalmology: A New Era or an old Saga?

Dr. Savleen Kaur

Assistant Professor, Advanced Eye Centre, PGIMER

If you search “Genetics in ophthalmology” on PubMed, you get a little over 40,000 search results. Furthermore, over 80% of these papers have been published in the last ten years. The genetic tests ordered by ophthalmologists have sharply increased in the last few years. Every sub-specialty conference has seen an increase in the sessions on ocular genetics. Gene therapy is the new kid on the block and genetic tests are more easily available, accessible and economical by the day. But the question we should figure out is, is it something new we are discovering by more testing, or just getting familiar with the already known?

Let me take you a few centuries back. The science of heredity dates back to the work of Gregor Johann Mendel who was ordained in 1847. After having experimented on twenty-eight thousand plants, forty thousand flowers, and four thousand seeds, he wrote only one monumental paper. The paper was read in a small hall in Brno and was then followed by what is popularly known as "the strangest silences in the history of biology". His work was then rediscovered by three other scientists forty years later. Was it that his work was overlooked (akin to plagiarism) or was it a strange coincidence that three other scientists converged on Mendel's work? But his voluminous work couldn't be ignored and only then Mendel was credited with one of the biggest discoveries in the field of heredity. With all the information available, and the code being now decipherable, the scientists got all “information” in the materialistic sense also, which laid foundation of the modern-day genetics.

The screenshot shows a PubMed search interface. The search term is "genetics in ophthalmology". The results page shows 48,972 results. A "RESULTS BY YEAR" graph is visible, showing a sharp increase in results starting around 2015, with a red arrow pointing to the year 2025. Below the graph, there are options for "TEXT AVAILABILITY" (Abstract, Free full text, Full text) and "ARTICLE ATTRIBUTE". Two search results are displayed:

- TUBB4B is essential for the expansion of differentiating spermatogonia.**
Sanzhaeva U, Wonsetler NR, Rhodes SB, Ramamurthy V.
Cite: Sci Rep. 2024 Sep 7;14(1):20889. doi: 10.1038/s41598-024-71303-8.
PMID: 39244520
- Safety and efficacy of ATSN-101 in patients with Leber congenital amaurosis caused by biallelic mutations in GUCY2D: a phase 1/2, multicentre, open-label, unilateral dose escalation study.**
Yang P, Pardon LP, Ho AC, Lauer AK, Yoon D, Boye SE, Boye SL, Roman AJ, Wu V, Garafalo AV, Sumaroka A, Swider M, Viarbitskaya I, Aleman TS, Pennesi ME, Kay CN, Fujita KP, Cideciyan AV.
Cite: Lancet. 2024 Sep 7;404(10450):962-970. doi: 10.1016/S0140-6736(24)01447-8.
PMID: 39244273 Clinical Trial.
The aim of this study was to evaluate the safety and preliminary efficacy of ascending doses of ATSN-101, a subretinal AAV5 gene therapy for LCA1. METHODS: 15 patients with **genetically** confirmed biallelic mutations in GUCY2D were included in this phase 1/2 study. ...



There are many lessons that we learn from the life of Mendel. We as scientists, are at the same crossroads as we were, when this science was discovered. We are testing and repeatedly testing, mostly trying to pseudo-discover what is already known. We get excited with a positive genetic report, experiencing how exciting Mendel might have felt when he looked at traits like short height disappearing and then reappearing two generations later. We have proven inheritance in conditions that we had always known to be genetic. Are we not just testing and experimenting again and again? I am not writing against testing, and I do believe we add to our "information" by testing patients for underlying heritable conditions. But we should understand that testing alone is not making us smarter. We need to know who to test, what test to order when to test and the biggest challenge here is knowing when to stop. The pros and cons of testing should be explained to patients. Patients should not be tested merely to add to our number of papers. They should be tested to decrease the burden of genetic disease in our community and making them aware of how they can help to do that. Implications of prenatal testing and the effect on a couple's life should also be learnt by ophthalmologists daring to venture into this field. We should urge caution and be vigilant about the downside of testing as well. Pretest and post-test counselling should be made available to patients by a geneticist and not by 'ophthalmologist practising genetics.

In conclusion, we should understand the science, explain to the patient what information we will get, and offer counselling before every test we order. Otherwise, we will be merely doing, what has already been done, by someone else, before. I am reiterating an old phrase "a little knowledge in genetics can be a dangerous thing for ophthalmologists".

IN MODERATE TO SEVERE DRY EYES





Silk - Tear

Polyethylene Glycol 400 NF 0.4% w/v, Propylene Glycol IP 0.3% w/v. EYE DROPS

SUSTAINED LUBRICATION AND PROTECTION TO THE OCULAR SURFACE

POLYETHYLENE GLYCOL
Polyethylene Glycol 400 is a low molecular weight grade of Polyethylene Glycol with a low-level toxicity. It is very hydrophilic, and it is useful ingredient in drug formulations to augment the solubility and bioavailability of weakly water-soluble drugs.

PROPYLENE GLYCOL
Propylene Glycol forms a protective layer over mucous membranes relieve inflammation or irritation. It also increases the viscosity of the eye drops.

INDICATION

- 🔴 Relieves Dry-Eye Discomfort.
- 🔴 Computer Vision syndrome
- 🔴 Preserve the ocular surface microenvironment.

Remove Dryness
Bring Freshness



नेतदान महादान

Dr. Neha

Optometrist AEC, PGIMER

ईन आँखो से हम देखते, जो देखते वो सोचते, जो सोचते वो करते है, ईन आँखो पे ही मरते है,

पयुपिल रिएक्शन RD से न्यूरो तक का हाल बताता है, डाई आई वाला बंदा आंसू बहा नहीं पाता है, स्क लेरा के कलर से हम अंदाजे कई लगाते है, ऑकुलर मूवमेट्स जहां ले जाए टॉरच वही घुमाते है, *cornea* एक आईना है, चेहरे कई दिखाता है, 02 और टियर फिल के भरोसे खाना खाता है,

ये दुनिया हमे दिखाता है, मरने के बाद भी काम आता है, ईन आँखो से हम देखते, जो देखते वो सोचते, जो सोचते वो करते है, ईन आँखो पे ही मरते है,

मानो अंधेरा एक छा जाए, रोशनी ना आ पाए, तुम पागल से हो जाओगे मदद के लिए चिलाओगे, आवाजे कई आएंगी चेहरे ना

देख पाओगे, कहां, कब और किधर है जाना, लाठी के साथ जाओगे, ना अपनो का अहसास ना जजबात देख पाओगे, धुंधले से अंधेरे मे डूबते तुम जाओगे,

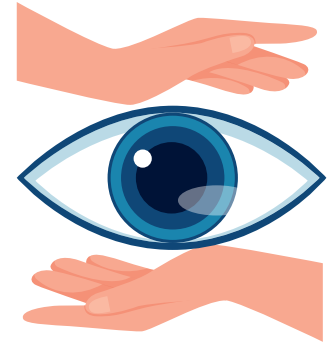
तो ईन आँखो से हम देखते, जो देखते वो सोचते, जो सोचते वो करते है, ईन आँखो पे ही मरते है,

मानो उमीद एक आ जाए, डूबने से बचा जाए, *cornea* का दान हो नई जिंदगी का वरदान हो,

खाक बन के हम नदी और कब्रो मे रह जाते है, दुआ वो रूह देती है, जिसे दान की रोशनी से हम मिलाते है,

अपनी बेटी को भी गैरो को दान मे दे जाते है, कन्या दान महा दान का नारा हम लगाते है, ये तो अपनी आँखे है जो जिंदगी दे जाएंगी, आस बन के आएंगी, वजूद देके जाएंगी,

तुम जाने के बाद भी दुनिया किसी को दिखाओगे, नेतदान महादान का नारा फक्र से लगाओगे ।।





LET IT GO

Dr. Shubham Manchanda

SR, Ophthalmology PGIMER

As a junior resident, having done his first independent surgery, a visual outcome of 6 /9 is exhilarating and a little tempting to be more aggressive the next time. So, in my next case, it was very difficult to leave behind that last chunk of cataract, knowing it was the only thing standing between me and an excellent post operative outcome. My consultant probably noticed my aggression and advised me to leave the last piece behind, which in any case would not affect the outcome. She cautioned me repeatedly, but having seen my peers do it easily, i pushed the aspiration tip a little too deep. While I was able to remove the last piece, along came a big piece of posterior capsule. Never having seen this before, something froze inside me. The sudden feeling of remorse left me astounded and I couldn't move my fingers.

"It's ok", my consultant's voice resonated inside my ears, along with my own heart beat.

While I was still recovering from the shock, my consultant had already filled up the anterior chamber with viscoelastic and switched positions with me. Standing on the side lens, i watched her manage the case. I know I should have seen how she went about managing the complication but all I could do was simply marvel at the ease with which she was doing whilst teaching me the same!

"Load the IOL, we still have an adequate sulcus", she had to ask me twice, before her words finally broke through my awe stricken face.

She dialed the IOL into the sulcus and finished the case. Having calmed down, I saw her looking at me as if asking me to follow her to the doctor's lounge.

"Where do you think it went wrong?" She asked as I escorted her out of the OT.

"I should have left that piece", as I spoke, I realised my mouth had gone dry.

"Learn to let go, it is the right step more often than you realise". She replied politely.

I mustered my courage to ask, "How did you control your anger, given that this was a completely avoidable complication?"

She probably saw this question coming (i still had that awe struck face!).

"I let go." she smiled." Try it, works equally well in life too".

"Let it go", as these words reverberated inside me, i realised that I had probably learnt the most important lesson of my residency.

To my surprise, the patient managed to have a 6/6 visual outcome with glasses.

As a new recruit, it is very easy to be swept away by the flawless surgeries done by our teachers. I have been blessed to be a part of an institute where every surgery is a step towards perfectionism but at the same time it is important to know that residency is a long journey, with many tunnels. At the end of these tunnels, you may not be successful but you will be worthy. Worthy of someone entrusting you with their grievances. So no matter where you are in the journey, trust the process and give it your best shot. As one of my teachers often says, "You may not learn from the best of everyone, but you can learn the best of everyone".

(Dedicated to my teachers at AEC, PGIMER CHANDIGARH)



COS highlights 2023-24

Eye Donation Walk

EYE DONATION AWARENESS WALK

Let's Walk together to make a Difference

Sunday, 1st September, 2024
Assembly Time: 5:15 PM
Rock Garden to Sukhna Lake

Chief Guest: Prof. Vivek Lal, Director, PGIMER
Sh Ajay Chagti, IAS, Secretary Health, Chandigarh
& Smt. Anuradha S Chagti, CCS, Secretary Social Welfare
as Guests of Honour will flag off

Be the Light in Someone's Darkness

Organised by:
EYE BANK, ADVANCED EYE CENTRE, PGIMER
in association with:
**LIONS CLUB CHANDIGARH CENTRAL
& EYE BANK, GMCH-32**
Under the aegis of COS





COS highlights 2023-24



Eye Donation Awareness walk



Release of COS Newsletter



Summer CME





12th Postgraduate Teaching Program

(Organised at Govt. Medical College and Hospital, under aegis of COS)



Hands On Dry Labs.....



*Dr. I S Jain
Memorial Oration conferred to
Padma Shri Prof Jagat Ram*



*Dr. A D Grover
Memorial Oration conferred to
Padma Shri Prof Jeevan Titiyal*



Glaucoma Week Walk Pictures





INTRODUCING...

**The Latest & Powerful Innovation
in Ocular Surgery...**



Tropicin-PTM PFS

Tropicamide, Phenylephrine Hydrochloride
and Lidocaine Hydrochloride Injection

**PRESERVATIVE FREE
STERILE SOLUTION**

**Available
As Pre-Filled
Syringe**



**Designed For Precision,
Efficiency & Patient Comfort**

ALSO AVAILABLE

Tropicin-P

EYE DROPS

Tropicamide 0.8% + Phenylephrine HCl 5%

Tropicin

EYE DROPS

Tropicamide 1% Ophthalmic Solution I.P.



E-mail : aromedpharma1@yahoo.com | website : www.aromedpharma.com



PROVIDING
QUALITY
HEALTHCARE SOLUTIONS
GLOBALLY

*Clear Vision
of the Future*

OUR MOTTO
"Best Quality,
On Time Every Time"



34
Years of
excellence



09
Presence
in Countries



75+
Scientist
in R&D



40+
Patents
Granted



08
Consecutive years-
Great Place to work



EU-GMP



Russia, Ukraine, Kazakhstan,
Kyrgyzstan & PIC/s GMP



WHO-GMP



ISO 13485:2016



ISO 14001:2015
ISO 9001:2015



OHSAS 18001: 2007





Echoes of a Mother's Wisdom

Dr. Khushdeep Abhaypal

SR, Pediatric Ophthalmology and strabismus AEC, PGIMER

I leaned against the cool wall of the hospital corridor, fatigue weighing down every part of my body. It was well past midnight, and the hours had blurred into one long, exhausting stretch. The emergency on-call phone buzzed in my pocket, breaking the brief moment of stillness I had stolen.

For a second, I considered ignoring it. After countless hours in surgery, all I wanted was a few minutes of rest. But just as quickly, my mother's voice echoed in my mind, a comforting reminder of the values she had instilled in me.

"Being true to your profession is the biggest prayer to God," she would say. "You don't have to sit and pray; your work is your devotion."

It wasn't the first time I'd felt overwhelmed by the demands of my residency. The late nights, the relentless pace, and the emotional toll of caring for patients were often more than I thought I could bear. But my mother had always seen things differently. To her, every patient who reached out to me was a testament to my capability.

"God has made you capable," she'd remind me whenever I called her, frustrated or tired. "That's why people call you. Not everyone is being called, Khushi. It's a privilege."

Her words always had a way of grounding me, pulling me back to the core of why I chose this path. I knew that each call was more than just a demand for my time; it was a request for help, a sign of trust from someone in need.

I took a deep breath and pulled out my phone. The message was from the eye emergency—a child with an eye injury had just arrived, having been referred from Jammu. Instantly, I knew I had to go. This was my prayer, my way of serving, of answering the call that only I could answer.

When I arrived at the emergency room, I saw the child clinging to his mother, fear written across both their faces. As I approached, I could see the relief in their eyes. In that moment, I understood more deeply than ever what my mother had been trying to teach me all these years. My work wasn't just a job; it was a calling, a chance to bring light into someone's darkness.

After operating the child, his mother looked at me with tearful gratitude. "Thank you, doctor," she whispered, her voice filled with emotion.

As I walked back down the quiet corridor, my heart felt lighter, the fatigue easing with each step. My mother's words echoed softly in my mind, reminding me that being true to my profession was indeed the greatest prayer I could offer. And as long as I was being called, I knew I was exactly where I was meant to be.





Sun Shine's on All !!

Dr. Irwinder Pal Singh

Chief Eye surgeon at, DR. K.P's Eye Care Centre, Chandigarh
Specialisation : Anterior Segment, Glaucoma and Medical retina

Life brings a lot of up's and downs.

The moment we decide to walk out of school and made to jump in the wagon of competitive exams, in the pursuit of a life which either we want or led by the beliefs of our family. Many a time in the initial years we don't even know whether the path we are walking on is the right one, in-fact even many years later the path/journey will feel lacking clarity.

I am a middle aged man who is married to a beautiful and successful wife and has 2 wonderful kids, but still sometimes in my lows i look back and question some decisions and what lead me to walk on the path that i did.

Being a doctor i have to take a decision to write a prescription many times a day, what medicines and how many times keeping in mind the patient's over all welfare . But even then sometimes when the patient comes for a followup some are very happy and some not, which again forces us to think about our decisions.

Life is not easy to understand or interpret, it feels good to hear that we are where we were supposed to reach no matter what , heart may agree but the brain will not because someone else's life or path may appear more rosy.

Analysing every act that takes place is never easy, even if we discuss the same issue with different people than we realise different explanations being given. Some days when we are at a high professionally or at the personal front one feels that greatness is right at the corner and everything done was done for the best and all led to this moment of triumph but it all scatters in the light of failure if that occurs.

Taking one day at a time and forgiving our own selves, being gentle with our own self will make the journey less stressful, in this world where false narratives are every where around us thanks to the social media, it is very easy to question everything one has done so far , easy to question the mere presence in life.

Who decides success ? Ideally we should because if we give the marker to someone else then it will be more confusing and difficult to understand.

What is success ? Again something one should decide on his/her own because for some it will be the most basic and for others the absolute luxury.

Being harsh with oneself is easy, being rude with a weaker person is easy, tormenting a weak animal is easy but you cannot do the same thing to a stronger or bigger person/animal.

Take a decision and if by any chance it does not workout than do not give up on yourself , try looking for the other options also a good idea to ask for help but never a good idea to loose your own confidence and harm your ownself. Why give the power to effect or influence you on someone else? why not create an



atmosphere where we are happy with our setbacks and success alike, why try to prove ourselves in front of someone else? why not be happy with what we have and try to improve ourselves in our own minds and own image.

God or nature looks upon everyone alike, no matter the rich or poor , successful or failure .. rain will fall on everyone and so will the first rays of the morning sun.

When the creator sees everyone as alike than why question our existence in comparison to anyone else. Lets learn to be happy with where we are and what we are, of course life is like a track and we have to keep moving forward and on the way improve ourselves and take along others, help others and when we reach the end than thank the God for all the things we got to experience, all the ups and down and say a happy goodbye to all with no regrets!!

We are all equal, some reach different milestones and some others but that does not mean that the milestones reached by some are more greater, it is all our mindset and we can only improve that by gratitude and never giving up .. no need to run, just keep walking let the scenes of life unfold in front of you and enjoy the view even on the hospital bed because the cycle has to be finished either with tears or smile and what wonderful way than a smile and shukrana (Thank you) to the path/journey because everyone has their own unique one.

God will never give up on you, even in the darkest of moments or days when you remove the curtains the sun will rise and shine your life, asking you to be kind to yourself and keep walking !!

PRODUCT RANGE

IRIVISC
(Carboxymethyl cellulose 0.5%) Eye Drops

IRIVISC Liquigel
(Carboxymethyl Cellulose 0.5% + Osmoprotectants) Eye Drops

MACUCHEK Forte
(Omega 3 Fatty Acids + Carotenoids) Soft Gel Capsules

Lotechek
(Lubricated 0.1%) Eye Drops

TOBAREN
(Tobramycin 0.3%) Eye Drops

HOMIDE
(Homatropine hydrobromide 2%) Eye Drops

PATENTED

1st time in INDIA
to introduce
BAK/SOC-free Drops

Data on file
DED: Dry Eye Disease

Indoco Remedies Limited Indoco House, 166 CST Road, Santacruz (E), Mumbai 400 098, INDIA.



Topical Cosmeceuticals and the Eye: Cheat Sheet



Dr. Aditi Mehta MD ¹

Dr. Kasturi Bhattacharjee MS ²

Dr. Swami Dass Mehta MD ³

1. Consultant, Oculoplastics & Facial Aesthetics, Department of Ophthalmology, Grewal Eye Institute, Chandigarh, India

2. Director & Head of Department, Ophthalmic Plastic & Reconstructive Surgery Cataract & Refractive Services, Sri Sankaradeva Nethralaya, Guwahati, Assam, India

3. Consultant, Department of Dermatology, Grewal Eye Institute, Chandigarh, India

Introduction

The term cosmeceutical was first coined by Albert Kligman in 1984. It encompasses a bridge between pharmaceutical (a drug/ chemical compound intended to alter the bodily function) and a cosmetic (a formulation designed to enhance appearance without any proven biological modification of a bodily process) Most cosmeceuticals do exert some biological effects like collagen remodeling, pigment reduction, neuromuscular relaxation etc but are available over the counter in many formulations.¹ Therefore, the term essentially bridges the gap between a cosmetic product and a pharmaceutical drug.²

A compound which when applied onto the skin, results in a beautification or enhanced appearance, has shown a good safety profile, does not cause any harm and has not been shown to lead to any alteration of body structure or function, it may be marketed as a cosmetic. These compounds do not require rigid testing and clinical trials, have a quick turnover time from “laboratory to shelf” and hence less regulatory restrictions. In contrast, if a similar compound via randomized control trials has been evaluated to produce an alteration of bodily function or structure or to treat a disease, it has to undergo rigorous licensing and requires a prescription as it is now classified as a pharmaceutical or a drug.

The classic example for this is Vitamin A derivatives- retinol (alcohol), retinal (aldehyde) and tretinoin / retinoic acid. Retinol is available over the counter (cosmeceutical) for treatment of photodamaged and aging skin. Retinal is a less irritating form topically. Within the body, it is the primary molecule involved in the visual cycle in the human eye’s retina photoreceptors layer. Tretinoin is the prescription form (drug) for dermatologic use to improve aging skin, lessen the effects of solar damage. Tretinoin has shown to reverse the effects of photodamage and aging in half the time as retinol, with extensive trials on its clinical efficacy as an anti-aging molecule.³

Table 1 summarizes the main types of cosmeceuticals for periocular skin.

Type	Target	Active Compounds
Anti-wrinkle Cosmeceuticals	periocular fine lines and wrinkles which appear due to sun damage as well as repetitive expression lines	<ul style="list-style-type: none"> retinols/ bakuchiol which increase production of glycosaminoglycans and slow down breakdown of collagen topical neuromuscular relaxants- argireline, leuphasyl, vialox, dipeptide diaminobutyroyl benzylamide diacetate, act pre or post synaptically to decrease acetylcholine mediated neuromuscular contraction
Anti-pigmentation	Inhibit tyrosinase mediated melanin production, regularize melanocyte proliferation	<ul style="list-style-type: none"> Arbutin (hydroquinone and D-glucose)-dose-dependently reduces tyrosinase activity at post-translational level Kojic acid (5-hydroxy-2 hydroxymethyl-4-pyrone) is a potent antioxidant, and inhibits the production of free tyrosinase enzyme involved in melanin production Tranexemic Acid has anti-plasmin activity which in turn inhibits melanin synthesis
Photoprotection	Protect from ultraviolet radiation (UV)	<ul style="list-style-type: none"> Chemical sunscreens absorb UV radiation and convert them to lower energy non carcinogenic wavelengths. UV-A blockers: benzophenones, anthranilates, avobenzones and ecamsule; UV-B blockers: aminobenzoates, cinnamates, salicylates, octocrylene, ensulizole and camphor derivatives. Physical sunscreens include zinc oxide and titanium dioxide protect against UV-A and are safe in pregnancy Sunglasses along with broad-rimmed hats for eyes and face.
Antioxidants	Scavenge free radicals	These include vitamin C, vitamin E, silymarin, and green tea polyphenols.
Barrier Function	Moisturize and restore epithelial barrier	Ceramides: Externally applied ceramides get incorporated into the intercellular lipid in the stratum corneum and replenish the barrier
Scar modulation	Regenerative and restorative	<ul style="list-style-type: none"> Silicone gel: hydration and protection Allium cepa onion extract: reduce fibroblast proliferation Aloe vera: increases re-epithelialization Vitamin E: anti-oxidant Trolamine enhances formation of granulation tissue and collagen synthesis in wound healing

Side effects

Non-specific adverse events with periocular use include chemical injury in the eye due to accidental spillage during application. Saline wash is recommended along with formal ophthalmology consultation.

Retinol containing formulations when applied close to the eye can induce meibomian gland dysfunction leading to dry eye and poor tear film stability.

Allergic dermatitis may develop to the constituent chemical or the vehicle or added preservatives and fragrances.

While prescribing these, it is important to warn the patient of the possible side effects. It is also advisable to encourage sun protection and maintain a slow initiation- starting with night-time only application and gradually increasing the concentration.

Side effects

Non-specific adverse events with periocular use include chemical injury in the eye due to accidental spillage during application. Saline wash is recommended along with formal ophthalmology consultation.

Retinol containing formulations when applied close to the eye can induce meibomian gland dysfunction leading to dry eye and poor tear film stability.

Allergic dermatitis may develop to the constituent chemical or the vehicle or added preservatives and fragrances.

While prescribing these, it is important to warn the patient of the possible side effects. It is also advisable to encourage sun protection and maintain a slow initiation- starting with night-time only application and gradually increasing the concentration.



No Country for Doctors

Dr. Rajesh Dhull

Consultant Ophthalmologist Gmsh -16 & Allied Hospitals

I find myself staring at the walls of the hospital, feeling their cold indifference against the storm of emotions churning inside me. We come here every day, don our white coats, and immerse ourselves in a world of healing. We're surrounded by those who share our calling, our purpose. For many of us, the hospital is more than just a workplace; it's our second home. We've found solace in its quietest corners, slept in its shadowed nooks, and grabbed meals wherever we could, believing this sanctuary was beyond reproach. But now, that feeling of safety is forever tainted, and the comfort we once took in these familiar spaces feels like a haunting memory with that sanctuary being irrevocably shattered.

She was one of us—an aspiring doctor with dreams of making a difference, a compassionate soul who came here with nothing but the intent to heal. Yet, within these very walls meant to protect and nurture, she was met with unimaginable brutality. Her life was stolen from us in the place we thought was sacred.

How did we fail her? How did we allow a place of care to become a scene of such horror? Her death wasn't just a tragedy—it's a gaping wound that exposes a deeper darkness within our world. It reminds us that even within these hallowed halls, where we fight daily battles against illness, we are not immune to the cruelties that lurk in the shadows.

I'm angry, but more than that, I'm heartbroken. Heartbroken for her, for her family, and for all of us who now walk these halls with a shadow over our hearts. Her absence is a harsh reminder of the vulnerability we all face, even in what we thought were safe havens. We owe it to her to ensure that her memory ignites a change—a demand for safety, respect, and an end to the indifference that allowed this to happen.

We have to remember her, not just as a victim, but as a beacon of what we strive to be—a reminder that every life is precious, every doctor deserving of safety. Her story must become a catalyst for a profound reckoning, to make sure that no one else has to endure such a fate.

We can't let her be just another statistic, another tragic story that fades with time. We owe it to her, to ourselves, to demand more—to demand safety, respect, and a world where no one has to fear the very place they go to heal others. We have to honor her memory by ensuring this never happens again, by making sure her death isn't in vain.

#JUSTICEFORABHAYA





From Editor's desk

Dear Members,

As the Editor of the COS newsletter, I am delighted to bring you this edition, which aims to bridge the gap between clinical practice and research, providing a platform for knowledge exchange and collaboration. Our mission is to highlight the remarkable work of talented ophthalmologists in our society and to showcase their contributions to advancing eye care.

In these challenging times, the strength and unity of our medical community have been truly inspiring, especially in the face of violence against doctors. We stand together, resolute in our commitment to provide compassionate and high-quality care to our patients.

I look forward to seeing more collaboration among our members, fostering innovation, and enhancing the services we provide. Let's continue to work together to build a future where clinical excellence and ground-breaking research go hand in hand.

Warm regards,



Dr. Sonam Yangzes

Editor, COS Newsletter 2024
Chandigarh Ophthalmological Society

Executive Members



DR AMIT GUPTA
President



DR SUSHMITA KAUSHIK
Sr. Vice President



DR SHRISHTI RAJ
Vice President



DR JASPREET SUKHIIA
Past President



DR SURESH KUMAR
Past President



DR PARUL ICHHPUJANI
Secretary



DR PARUL CHAWLA GUPTA
Jt. Secretary



DR FAISAL TT
Treasurer



DR SONAM YANGZES
Editor Newsletter



DR SHWETA CHOURASIA
Library Officer



DR DEEKSHA KATOCH
Executive Member



DR HARPREET KAPOOR
Executive Member



DR SUMEET KALRA
Executive Member



DR AMANPREET KAUR
Executive Member



DR TANU SINGH
Executive Member



DR GURDIP BOPARAI
Executive Member



DR ADITI MEHTA GREWAL
Executive Member



DR ARCHANA MALIK
Executive Member



DR P SINGH
Executive Member