



## COVER STORY

### PGIMER IN THE COVID 19 PANDEMIC

The Post Graduate Institute Of Medical Education And Research, Chandigarh is a 2000 bedded tertiary care hospital & teaching institute which provides state of the art medical services to patients from all over India. PGIMER has been ranked repeatedly as the 2nd Best Medical Institute in the country by NIRF and has been rated among the cleanest hospitals of the country in Kayakalp assessments. The average 2019 statistics of PGIMER were total OPD patients 29,14,343, Emergency OPD patients – 1,23,541 and indoors admissions 1,00,009.

In 2020, with COVID 19 lurking on our heads, we had this humongous task of taking care of the COVID-19 affected as well as non-affected patients.



The whole administration, management, staff and doctors, came together to form a high-level support system for the COVID Patients. Dedicated doffing and donning areas were made, intensive care units were set up. Isolation areas were created and general wards with separate oxygen facility for every bed were created. Currently, our labs are doing more than 1000 tests/day. Real time PCR and GeneXpert is being done for all elective and emergency admissions. Over 75000 tests have been done so far. Real time PCR takes 7 to 8 hrs for the result and GeneXpert take 2 hrs for the result (emergency cases). PGIMER caters to the states of Punjab, Haryana, Himachal, Uttarakhand and the UT's of Ladakh and Chandigarh. In addition, PGIMER, Chandigarh mentored 26 labs for COVID19 testing from various states of Punjab, Haryana, Himachal Pradesh, Jammu and Kashmir, Ladakh, Uttarakhand and Chandigarh. About 1300 staff was trained regarding donning and Doffing, Infection control practices and handling biomedical waste. We also pioneered various treatment options including plasma therapy, steroid, tocilizumab and covishield vaccine. The overall recovery rate of COVID-19 patients in PGIMER is 80% till now and it is improving!

In summary, PGIMER has provided exemplary services during this COVID 19 pandemic. It is evident by a high recovery rate of COVID 19 in the region. PGIMER has ensured that non COVID patients are also catered to in the most efficient way by providing Emergency services 24 x 7 along with essential elective Inpatient & Outpatient services throughout this pandemic.

Lets hope that the new year brings better news, bigger services and the best results for the whole community at PGIMER and Chandigarh.



**DR JAGAT RAM**  
**Director**  
PGIMER , Chandigarh



## *From the President's desk*

### *Dear Members*

Seasons greetings and a Happy New Year. As the President of COS in these difficult times, I want to thank you all for entrusting me with this responsibility. Unfortunately we are witness to the havoc this pandemic has caused the world over; however, a storm does not last forever and we hope to see the end soon. My gratitude to all the health workers who have risen to the occasion during this difficult hour by providing unconditional service to humanity. I am honoured to follow the footsteps of our past presidents who have been stalwarts and each have contributed in their own strength with a vision. I am blessed to have such a committed team with a dynamic secretary who has left no stone unturned in regularly holding academic events on a virtual platform. I congratulate our editor for regularly bringing out this quarterly newsletter through which we keep you updated with the society news. I seek the co-operation of every member in taking this society forward. Every effort, small or large, will go a long way in achieving this goal.

***Wish you all good health.***



**DR JASPREET SUKHIYA**

President, Chandigarh Ophthalmological society



## *Secretary's message*

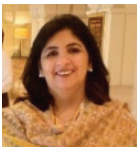
*Respected Seniors and dear friends,*

As 2021 dawns, it brings with it hope and optimism for the coming year. The development and rollout of the indigenously developed COVID vaccines in such a short time and under such dire circumstances is a testimony to the scientific temperament and the 'never say die' attitude of the Indian researches. A big 'thank you' to all those involved directly or indirectly in this process...

As a society we have tried to adapt to the 'new normal' and held monthly virtual meetings covering many subspecialties including cataract, cornea, glaucoma, retina, neurophthalmology and oculoplasty. The links to all these webinars are available on our website **chdoph.com**. We hope to continue with these virtual scientific meetings on a regular basis and look forward to your whole hearted participation and support.

With a silent prayer in our heart that the 'old normal' is just around the corner ... wishing all members of the COS family good health and a safe 2021.

Warm regards



**DR CHINTAN MALHOTRA**

Honorary Secretary  
Chandigarh Ophthalmological Society

For membership & other society details write to [secretarycos@gmail.com](mailto:secretarycos@gmail.com)

## **Editors note**

### *Take a Moment: Reflections on The Pandemic*

This is our new life. This is our new normal. Every year in January, we make new resolutions, new hopes, and new aspirations. This year as we march into 2021, we all wish good health. The world is unified like never before. The year has taught us that we should now decide how we want to live ahead. What gives us the maximum joy, love, money, our family or the experiences. We are not stuck; we are beginning to be free. If we want to change life, we should realise that we have the power to change it.

With this message, we bring another issue of the COS times with an amalgam of news from the ophthalmic and non-ophthalmic world. You can choose to enjoy reading the COVID news or dwell into some ophthalmic practical tips. Residents have some notes to remember. We sincerely hope you relish reading and we look forward to your suggestions and comments.

#### **Like us or hate us? Kindly tell us!**

We are waiting to hear from you! Send us articles/ viewpoints /any message/anecdote/interesting photo that you like to highlight at [mailsavleen@gmail.com](mailto:mailsavleen@gmail.com)



**DR SAVLEEN KAUR**

Assistant professor, PGIMER, Chandigarh





## Ophtha News

### Operating on a COVID-19 positive patient

**Dr Uday Tekchandani,  
Dr Manik Sardana, Dr Faisal TT**

Advanced Eye Centre, Post  
Graduate Institute of Medical  
Education and Research,  
Chandigarh



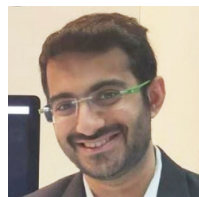
With the ongoing pandemic of COVID-19, there has been a lot of concern regarding the appropriate personal protective equipment (PPE) for the safety of medical personnel and safety measures for performing surgery in infected patients. With Dr Li Wenliang's demise, who was an ophthalmologist and the whistle-blower of the onset of the current pandemic<sup>1</sup>, there is an increased concern among ophthalmologists. The prevalence of SARS CoV-2 in tear samples of COVID-19 positive patients without any ocular symptoms has been reported to be between 6.1 to 28 percent<sup>2-4</sup>. As a result, special arrangements have been made at our institution for operating emergency ophthalmology surgeries in Covid-19 positive patients. A separate operating room with a dedicated microscope has been made available. Scrubbing prior to donning is essential, as PPE kits are not sterile. Post donning – a thorough scrub over the gloves and the PPE kit is mandatory with iso-propyl alcohol rub. A sterile gown is then worn over the PPE kit with a fresh pair of sterile gloves. The use of protective goggles as well as a face-shield is not mandatory once the patient is well draped especially if the operating surgeon wears spectacles, since the emergency surgeries performed are not aerosol generating (we have successfully managed corneoscleral tears, perforated corneal ulcers and phacomorphic glaucoma cases). Ensuring an adequate seal of the surgical N-95 mask is essential to prevent fogging of the glasses/goggles. With meticulous surgical technique, these cases can be well managed in such challenging times. As we have a well supervised system of donning and doffing in our institute, none of us operating surgeons have tested positive after performing ophthalmic surgery in COVID-19 positive patients yet. Our ability to contribute in these testing times reinforces our belief that "We Shall Overcome".

1. Green A. Li wenliang. The Lancet. 2020 Feb 29;395(10225):682

2. Xie, H., Jiang, S., Xu, K. et al. SARS-CoV-2 in the ocular surface of COVID-19 patients. Eye and Vis 7, 23 (2020).

3. Arora R, Goel R, Kumar S et al. Evaluation of SARS-CoV-2 in Tears of Patients with Moderate to Severe COVID-19. Ophthalmology. 2020 Aug 31.

4. Dutescu RM, Banasik P, Schildgen O et al. Detection of coronavirus in tear samples of hospitalized patients with confirmed SARS-CoV-2 from oropharyngeal swabs. Cornea. 2020 Sep 8.



**DR UDAY TEKCHANDANI**  
MCh Retina Senior resident, PGIMER





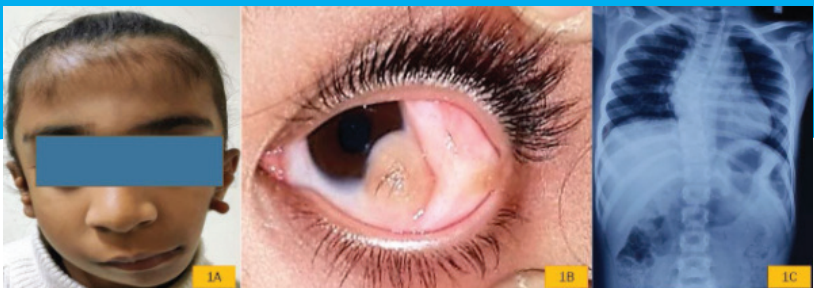
## Photo Snippet

### Goldenhar Gorlin Syndrome

#### Authors:

**Tanu Singh; Sudesh Kumar Arya; Smith Snehal Sute**

Department of Ophthalmology  
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Chandigarh, India



#### Legends

Figure 1A: Mandibular hypoplasia causing facial asymmetry

Figure 1B: Limbal dermoid in the infero-temporal quadrant measuring 6.2 mm x 4 mm in size with hair protruding from its surface

Figure 1C: X-ray showing scoliosis of dorso-lumbar spine

A 7-year-old female child, presented with chief complaints of yellowish white mass in left eye since birth. On ocular examination, her visual acuity was 6/6 in right eye and FC 3 mts which improved to 6/60 with a correction of +3.75 DS/ +0.75 DC @ 90° in left eye. Anterior segment examination revealed a yellowish white mass in the infero-temporal quadrant at the limbus measuring 6.2 mm x 4 mm in size with corneal extension not involving the pupil [Figure 1B]. The mass also showed presence of hair protruding from its surface. There was presence of pinkish yellow subconjunctival mass extending from the supero-temporal orbit consistent with features of dermolipoma in both eyes. Rest of the anterior and posterior segment finding were essentially normal. The systemic examination revealed presence of mandibular hypoplasia [Figure 1A], pre-auricular skin appendages on both side and visibly significant scoliosis of dorso-lumbar spine which was confirmed on X-ray [Figure 1C]. Patient gave history of spontaneous closure of patent ductus arteriosus. Since, the patient had a classic triad of limbal dermoid, microsomia with facial asymmetry and vertebral anomalies, clinical diagnosis of Goldenhar Gorlin syndrome was made. The patient underwent left eye dermoid excision with patch graft, following which the graft was well taken up and patients visual acuity improved to 6/12 with a correction of +1.75DS/+0.75 DC @ 70 degrees. The patient has been started on amblyopia therapy for the left eye.

Dr. Maurice Goldenhar first described a syndromic association with presence of epibulbar dermoid, preauricular appendages and pretragal fistulae. Later, Dr. Gorlin added presence of abnormal development of the first and second branchial arches to the existing syndrome there by giving a classical triad of mandibular hypoplasia (facial asymmetry)/ hemifacial microsomia, ocular and auricular malformations and vertebral anomalies, now known as Goldenhar Gorlin Syndrome.<sup>1</sup> The syndrome is generally caused by sporadic mutation, however, 1-2 % cases have shown familial association. Most common ocular manifestation is epibulbar dermoid, while the other ocular features commonly seen are upper eyelid colobomas associated with iris/ chorioretinal coloboma, subconjunctival dermolipoma and congenital nasolacrimal duct obstruction.<sup>2</sup> Ophthalmic management includes lid repair for lid coloboma, dermoid excision with patch graft if interfering with the visual axis, causing significant visual disturbances or for cosmetic blemishes, while dermolipoma does not usually require any surgical intervention.

#### References

1. Bogusiak K, Puch A, Arkuszewski P. Goldenhar syndrome: current perspectives. World J Pediatr. 2017 Oct;13(5):405-415.
2. Schmitzer S, Burcel M, Dăscălescu D, Popteanu IC. Goldenhar Syndrome - ophthalmologist's perspective. Rom J Ophthalmol. 2018 Apr-Jun;62(2):96-104. Review.

#### SMITH SNEHAL SUTE

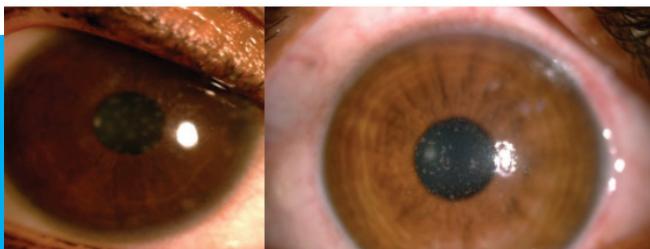
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Chandigarh, India



## Learning Point

Adenoviral and Microsporidia keratoconjunctivitis resemble so much that at times we get confused.

I am sharing certain clues which help me in differentiating them.



Keratoconjunctivitis	Adenoviral	Microsporidial
Corneal lesions	<ul style="list-style-type: none"> <li>Small, subepithelial,</li> <li>Can not be scraped as lesions are below epithelium.</li> <li>Can recur sometimes on stopping steroids</li> </ul>	<ul style="list-style-type: none"> <li>Large, Stuck on epithelium</li> <li>Large necrotic ones can be scraped.</li> <li>No recurrence unless repeat infection</li> </ul>
Conjunctivitis	Usually bilateral, No association with monsoon	Usually unilateral, Usually in July -September
Duration between conjunctivitis and corneal lesions	7-10 days	Within 2-3 days
Treatment	SEI in periphery left alone, Central vision threatening require mild Steroids with slow taper	Most resolve on their own, Large necrotic ones can be debrided, palliative therapy with antibiotic, lubricants



**DR. SUJATA DWIVEDI**

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## Recent Advances

### Vitargus: A Novel Vitreous Substitute

The ideal vitreous substitute is one that is biocompatible and degradable, allowing for retinal oxygenation while maintaining structural integrity. Currently available vitreous substitutes include air and expansile gases such as sulfur hexafluoride and perfluoropropane, as well as perfluorocarbon liquids and silicone. These vitreous substitutes have limitations, including the need for postoperative posturing, further surgery to remove it, and toxicity to ocular tissues.

Vitargus, is a recently studied vitreous substitute. Its an injectable, transparent hydrogel having refractive index of 1.34, close to that of human vitreous (1.33). The injection of Vitargus into the vitreous cavity in liquid form avoids the shear stress seen in preformed gels, while exerting sufficient compressive strength when it becomes a gel to perform its intended physiological function in holding the retina in place during healing. Potential applications of Vitargus as a vitreous substitute include retinal detachment repair, management of diabetic retinal hemorrhage with traction retinal detachment, and following repair of penetrating eye trauma, including intraocular foreign body removal.

First-in-Human Phase I Clinical Trial of Vitargus® has been issued. The preliminary findings of the study support the efficacy of the formula. Further studies and clinical use will establish the further development of this product.

Reference:

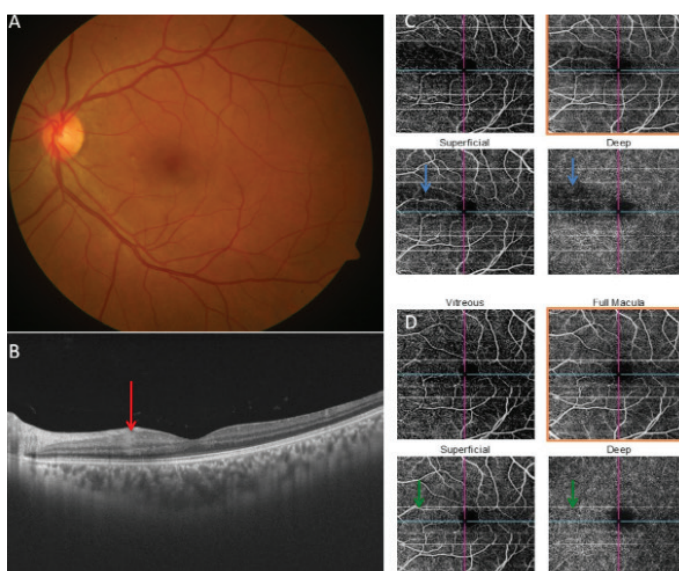
<https://www.aao.org/Assets/7364867f-bde6-421f-8269-253cd29a6b86/637054418220570000/aaosub-2019-ret-syllabus-pdf?inline=1>



**DR SABIA HANDA**

MCh Retina Senior Resident, PGIMER

## Resident Corner



A 33year old doctor presented with complaints of juxtafoveal scotoma in her left eye since 10 hours. She was diagnosed to have dengue fever (IgM positive) 8 days earlier and was afebrile since 2 days. BCVA was 6/6 in both eyes and the right eye was essentially normal. Anterior segment of the left eye was normal and the fundus was also unremarkable (Figure A). SS-OCT line scan passing through the fovea showed a normal foveal contour with linear hyperreflectivity involving the inner and middle retina, just nasal to the fovea (red arrow, Figure B).

A diagnosis of paracentral acute middle maculopathy (PAMM) secondary to dengue was made. Optical coherence tomography angiography (OCTA) of the left eye revealed flow void areas in the superficial capillary plexus (SCP) and deep capillary plexus (DCP), nasal to the foveal avascular zone (blue arrows, Figure C), confirming the diagnosis. 2 weeks of oral steroids led to restoration of flow in the SCP and DCP on OCTA and disappearance of scotoma (green arrows, Figure D).

### Teaching point

Hypo lesions on OCTA are seen in:

- 1) True absence of flow
- 2) Slow/sluggish flow
- 3) Blockage of light- RPE/ fibrosis/ blood/ tumors



**DR MOHIT DOGRA**

Assistant professor, Deptt of ophthalmology  
PGIMER

## Not only an Ophthalmologist

### Being Silent *Dr Mannat Giran*

It is fun to be silent,  
As quiet as one can be,  
When one is tired of being defiant,  
Quiet is what one should keep.

Silence has a mystery,  
Like a secret untold  
Obligatory in the library  
And in a chatty friend, it's a blessing to behold.

Try being silent,  
You would appear to be wise  
Practice it when questioned by your teacher,  
I suggest you reconsider my advice

It is fun to be silent,  
and difficult to express in a rhyme  
I would have told you in person,  
Though from me only silence will you find!



## Sobbing story to recite in this difficult Covid-19 fight

### Holding each others hands tight, to make all things right

**DR AMAN** Junior resident GMCH

- 1 Covid positive child with his mother (-ve)  
waiting to meet his brother  
Very fond of Chicken biryani, but in this heat requires " paani"  
Eagerly waiting to play that " Bat ball " with his friend in a hall  
Ask his mother when will he go home, looking at family in the phone  
Nobody can understand her situation where hopes are falling in the drain but still want some happiness to rain  
Can't leave my child as she says, looking back to good old days  
Missing her 2 year old baby, But still Hats off to this LADY
- 2 Positive mother of a newborn  
whose hopes are all torn  
Saying I don't know how it occurred  
but doesn't want my child to suffer  
Nobody can understand her internal fears  
how she is managing all those tears  
When asked about how she is feeling her heart sobbed  
saying that her happiness is robbed

My little efforts of toffee , clothes and goods can't heal them but  
trying my level best to make them smile and decrease there sorrow.  
I wish some of their pain i could borrow.

Wishing them speedy recovery and health which cannot be done  
with the wealth.

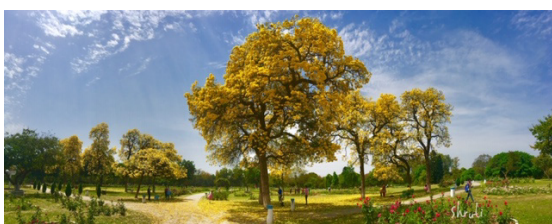
Hopefully my efforts could make them smile and help in early rise.





by **DR RAJWINDER**  
Professor  
Adesh institute of medical sciences

by **OBAID**  
Junior Resident  
GMCH



by **DR SHRUTI**  
Junior Resident  
GMCH

## Society News

### List of webinars

COS WEBINAR : THE CATARACT COMPENDIUM

COS WEBINAR : RETINA CLINICS FOR  
COMPREHENSIVE OPHTHALMOLOGISTS

COS WEBINAR : CASE FILES FROM THE CORNEA  
CLINICS

COS WEBINAR : ROP 360 DEGREES

COS WEBINAR : OCULOFACIAL AESTHETICS FOR  
OPHTHALMOLOGISTS

COS WEBINAR : NEURO-OPHTHALMOLOGY -  
'ACUTE VISUAL LOSS'

COS WEBINAR : EVERYDAY GLAUCOMA  
ILLUSTRATED BY CASES

COS WEBINAR : RECENT UPDATES ON  
NEOVASCULAR AMD

