# POST COVID RETINAL ABSCESS

**E-Poster Presented By:**

DR SUNIDHI GAUTAM (Author)

2nd Year Ophthalmology Resident

SBKS Medical College and Hospital

Vadodara ,(Gujarat)

**GUIDED BY :**

DR PUNIT SINGH (Professor & HOU)

Ophthalmology department

SBKS Medical College and Hospital

Vadodara ,(Gujarat

# INTRODUCTION

- The coronavirus disease 2019 (COVID-19) which is caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has led to a global pandemic.[1] Apart from severe systemic disease, various ophthalmic manifestations have been reported. [1]
- These are attributed to: 1) a direct result of the viral infection and its cytopathological effects; 2) adverse effects of the pharmacological therapy administered for COVID-19 infection; 3) manifestations related to prolonged hospitalization and intensive care (such as nosocomial infections) 4) and lastly due to alterations in the host immune response. [2]

# METHODS

- This case report focuses on a rare case of post covid retinal abscess ,its clinical presentation , diagnostic technique, management and response to treatment
- Pt presented during third wave of COVID 19 in september 2021.
- Pt underwent a complete eye examination which included visual acuity test, slit-lamp examination, color vision , contrast sensitiviyty, and binocular indirect ophthalmoscopy and imaging as applicable {B-scan ultrasonography (B-scan), spectral domain optical coherence tomography (OCT)and fundus photo
- Intravitreal injection followed by topical treatment was given and the results were evaluated on follow up

# HISTORY

- 23 year old female presented with complain of diminution of vision in OD for 3 days which is sudden in onset and painless in nature
- History of wearing glasses for 2 years
- She had been using gentamycin eye drops since 3 days in OD taken over the counter
- COVID 19 positive since 1 month even with appropriate treatment
- Not a k/c/o any co-morbidities
- No history of ocular trauma & ocular surgery

# EXAMINATION

❖DAY 0

- Visual Acuity :-

| VISION | OD | OS |
|---|---|---|
| UCVA | **CF3M** | 6/6 |
| BCVA | **CF3M** | 6/6 |

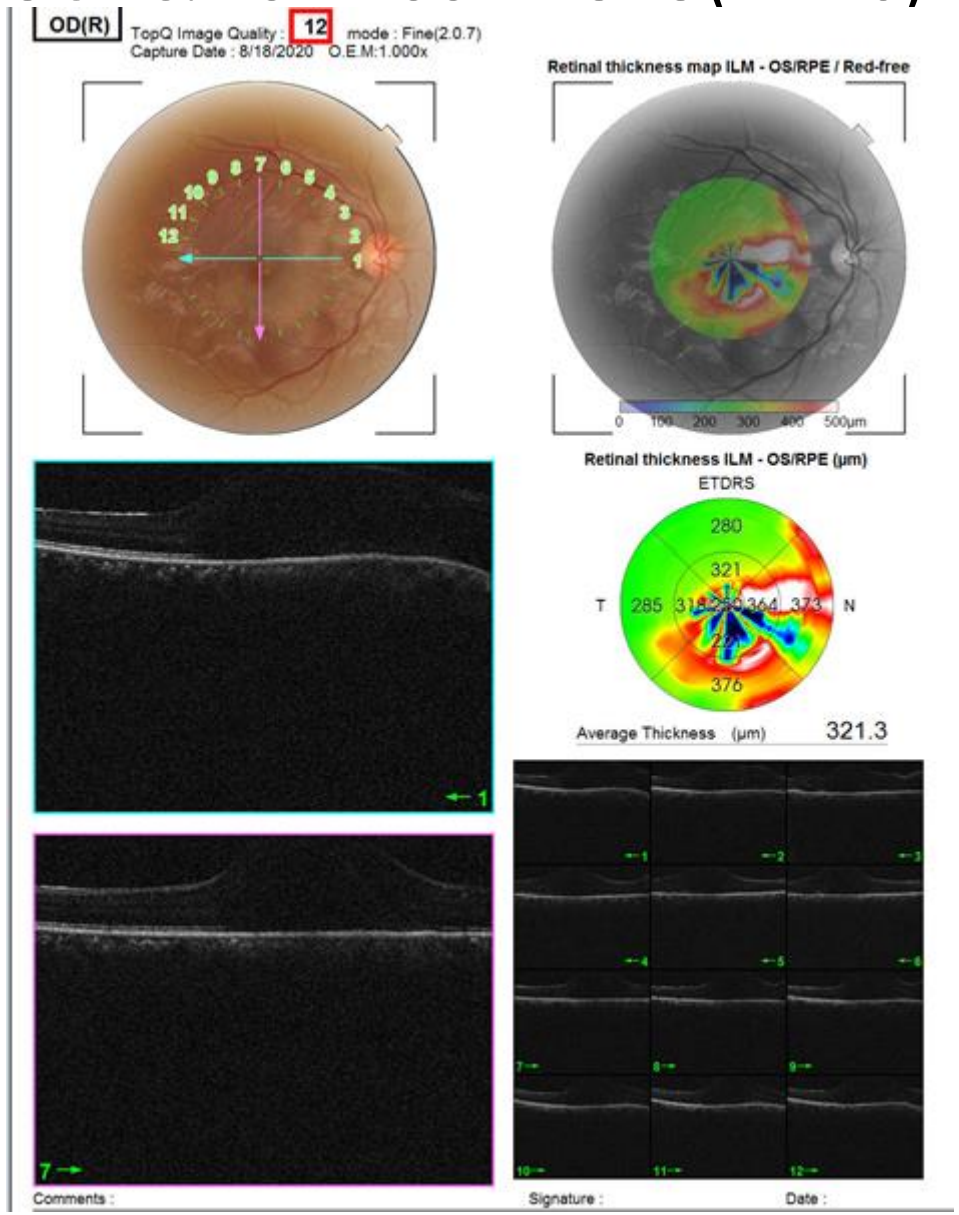
- Colour Vision:- **OD-5/17** OS-17/17
- Contrast Sensitivity:- **OD-1.20** OS-1.65
- Anterior Segment :- **OD RAPD Grade 1**

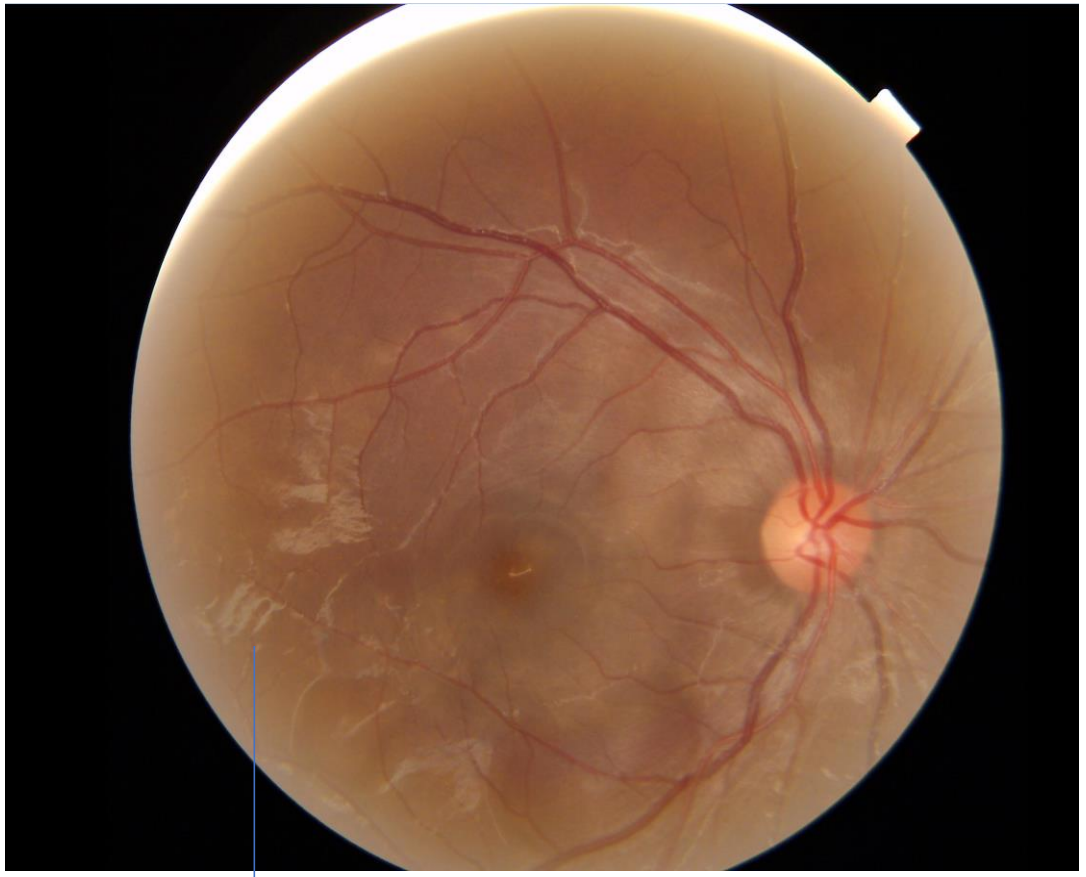
Rest within normal limit in both eye

- FUNDUS:-

| | OD | OS |
|---|---|---|
| MEDIA | Clear | Clear |
| DISC | 0.3 CDR with HNRR with normal shape & size Margins well defined | 0.3 CDR with HNRR with normal shape & size Margins well defined |
| MACULA | Foveal reflex absent & presence of fluid noted at macula | Foveal reflex+ |
| BACKGROUND | Retina ON,Normal | Retina ON,Normal |
| BLOOD VESSEL | NORMAL in caliber with A:V=2:3 | NORMAL in caliber with A:V=2:3 |

- OCT & FUNDUS PHOTO(DAY 0)



Artefacts

# Treatment Course

- Patient was posted for OD intravitreal Dexamethasone(0.1ml)+Vancomycin(1mg/0.1ml) under Topical Anesthesia with proper aseptic precaution
- After this patient was started on topical & oral medication

*Moxifloxacin eds(0.5%) qid for 1 month

*Nepafenac eds(0.1%) tds for 1 month

* Cefixime tablet(200 mg) bd for 7 days

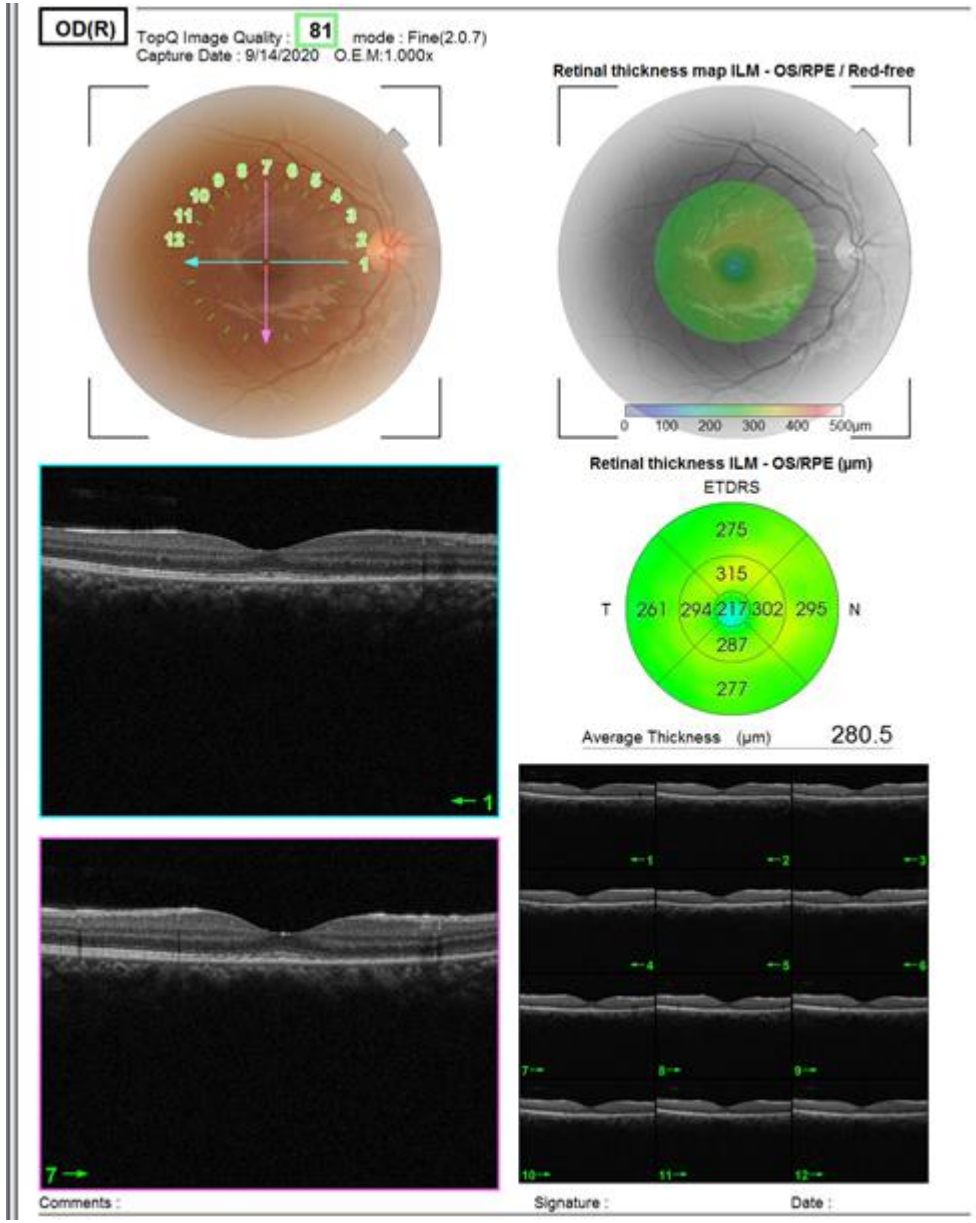
* Ciprofloxacin tablet(750 mg) bd for 7 days

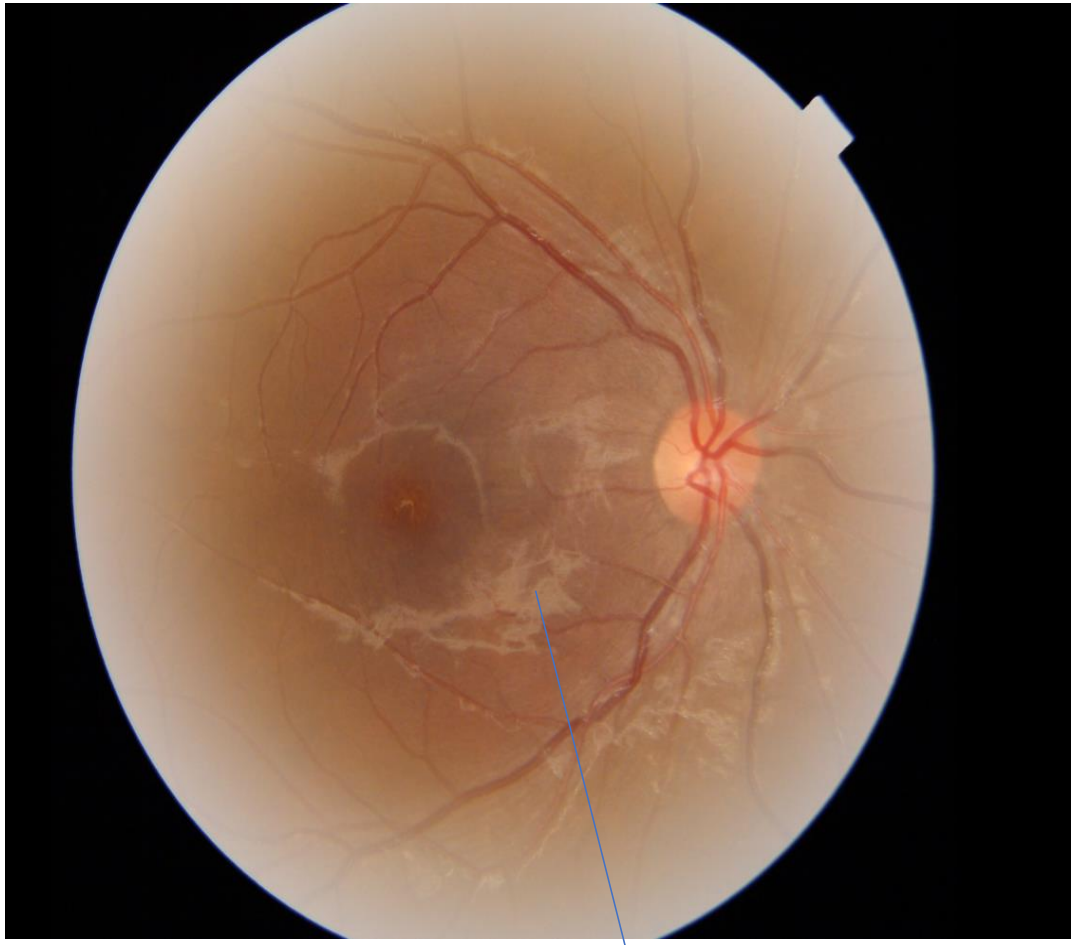
# On Follow UP(OD)

| (OD) | 1 MONTH later | 2 MONTH later |
|---|---|---|
| UCVA | **6/9** | 6/6 |
| PINHOLE | **6/9** | 6/6 |
| Colour Vision | **17/17** | 17/17 |
| Contrast Sensitivity | **1.65** | 1.65 |
| Anterior Segment | **NO RAPD**,REST WNL | NO RAPD,REST WNL |

| FUNDUS | 1 MONTH LATER | 2 MONTH LATER |
|---|---|---|
| Media | Clear | Clear |
| DISC | 0.3 CDR with HNRR with normal shape & size<br>Margins well defined | 0.3 CDR with HNRR with normal shape & size<br>Margins well defined |
| MACULA | **Fovea reflex+ with absent of fluid noted** | **Fovea reflex+ with absent of fluid noted** |
| BACKGROUND | Retina ON | Retina ON |
| BLOOD VESSEL | NORMAL in caliber with A:V=2:3 | NORMAL in caliber with A:V=2:3 |

- OCT & FUNDUS PHOTO(ON FOLLOWUP)



Artefacts

# Discussion & Conclusion

- There are various causes of retinal abscess which lead to sight threatening condition, thus they need early evaluation & promt treatment.
- As per patient history cause of retinal abscess was most probably post viral due to COVID 19 infection.
- So keeping that in mind the treatment was planned. Intravitreal & systemic antibiotics & steroid were given.
- Due to early evaluation & appropriate management patient vision is drastically improved within short period of time in such unusual case.

# ETHICAL ISSUES

•Written, informed consent will be taken by the patient before including his/her data as part of the study. However, if the patient decides not to participate in this study or for some reason at a later date, the patient wishes to withdraw from the study, she will be duly allowed and the subsequent medical care would not be affected. Participation in the study will be purely voluntary.
•Written, informed consent will be taken before the procedure.
•No new drug/surgical techniques are being employed in this study.
•Total care will be taken not to divulge name, OPD or IPD number of the case, facts of ill-health and other information of the patient to anybody without patients or their guardian's permission. Strict confidentiality will be maintained.
•Any change in study, protocol, or design will be communicated to the "Institutional Ethical Committee" in advance for approval.
• If any ethical issue arises later on, it will be informed to the ethics committee.

## Conflicts of interest

There are no conflicts of interest.

**References**

1. Bertoli F, Veritti D, Danese C, Samassa F, Sarao V, Rassu N, et al. Ocular findings in COVID-19 patients:A review of direct manifestations and indirect effects on the eye J Ophthalmol 2020 2020 4827304 doi:10.1155/2020/4827304Cited Here |
Google Scholar
2. Douglas KA, Douglas VP, Moschos MM Ocular manifestations of COVID-19 (SARS-CoV-2):A critical review of current literature In Vivo 2020 34 3 Suppl 1619 28Cited Here |
PubMed | CrossRef |
Google Scholar