

# Outcome of Transcutaneous Retrobulbar Injection of Liposomal Amphotericin B in Post COVID-19 Rhino-Orbital Cerebral Mucormycosis - Our Experience at GMC Akola

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## 1. Introduction

Mucormycosis is extremely aggressive and potentially fatal invasive fungal infection. Most common clinical manifestation of mucormycosis is Rhino-orbital-cerebral mucormycosis.

Transcutaneous retrobulbar injection of amphotericin B is treatment of choice along with intravenous antifungal.

## Epidemiology

Global burden of rhino-orbital cerebral mucormycosis was seen during pandemic of 2<sup>nd</sup> wave of COVID-19.

0.4 MILLIONS OF CASES SEEN AFTER COVID-19.

14872 CASES AS OF AFETR COVID-19,

## Risk factors for Rhono-orbital cerebral mucormycosis.

- 1) Immunocompromised individuals
- 2) Post COVID-19 patient due to indiscriminate use of immunosuppressant

## 2. Aims and Objective

- 1) To assess outcome and response with transcutaneous retrobulbar injection of liposomal Amphotericin B.
- 2) To assess prognosis of disease.

## Study Design

Intervention single center retrospective study

Duration-3 month (MAY 2020-JULY 2020)

## Inclusion Criteria

Previously COVID-19, RT-PCR POSITIVE Patient

## Exclusion criteria

Pregnant pt.

## 3. Materials and Methodology

Total 25 patients were selected in thus study from previously recorded data.

Detail ophthalmic examination, radiological examination laboratory investigations used.

## 4. Observation and Discussion

According to Sion hospital grading system patient were categorized into mild moderate and severe grade, 6 (25%) pt were in mild, 13 pt (52%) pt were in moderate 6 pt were in severe grade of rhinoorbital cerebral mucormycosis cases.

Firstly 1 ml of injection lignocaine given retribulbar space.

Then 1ml of 3.5 mg of injection of liposomla amphotericin B retrobulbar space for 3 cosecutive days.

## 5. Result

25 patient of rhino orbital cerebral mucormycosistrated with transcutaneous retrobilbarinjectin if liposomal amphotericin B.

No side effect was seen.

Improvement was seen in mild to moderate grade of cases.

## 6. Conclusion

TRAMB-Transcutaneous retrobulbar injection of amphptericin B, is viable option in patient, where orbital exenteration or debridement is not indicated.

Positive effect if TRAMB:

- 1) Reduced need for orbital exenteration
- 2) Intracranial spread is reduced
- 3) Improve visual prognosis
- 4) Improved severity score, and life expectancy.