Recommendation on antifungal therapy in Covid associated mucormycosis when antifungal drug availability is limited

• Antifungal prophylaxis is not recommended
• Start calculated dose of amphotericin B from first day, avoid dose escalation
• Fluconazole, voriconazole, echinocandins (caspofungin, anidulafungin, micafungin) or 5 fluocytosine is not active against mucormycosis
• Combination of antifungal therapy is generally not recommended, as there is little evidence in support of combination therapy

Detailed treatment protocol is provided in next page↓  May 20, 2021  http://www.fisftrust.org
Treatment of Covid associated mucormycosis

1. Diabetes control
2. Reduce steroids
3. Discontinue immunomodulators

Extensive surgical debridement (If eye involved, exenteration of eye; in lung, if localized or one lobe involved)

Medical therapy (maintain adequate hydration; put PICC or CVC)

Liposomal/lipid amphotericin B
5mg/kg/d for 3-6 weeks
1. In 200ml 5% dextrose over 2-3h
2. No slow escalation
3. In CNS infection, dose can increase to 10mg/kg/d
4. Monitor RFT, potassium & magnesium level

Lipid amphotericin B
Not available

Amphotericin B deoxycholate
- 1-1.5mg/kg/d for 3-6 weeks
1. In 5% dextrose slow infusion for 6-8 hours
2. Pre-medication to avoid infusion reaction
3. No slow escalation
4. Monitor RFT, potassium & magnesium level

Polyene not available or intolerant to polyene

Isavuconazole inj – 200mg tid on day 1-2 & 200mg/d from day 3 for 3-6 weeks
OR
Posaconazole inj – 300mg bid on day 1 & then 300mg/d for 3-6 weeks
(Monitor trough level after 3-5 days)

Polyene/Isavuconazole/posaconazole not available

Itraconazole – 200mg tid for 3-6 weeks (Monitor LFT every week)
- Injection preferable, suspension is the next choice before tablet
- Stop proton-pump inhibitor, H2 blockers when tablet used
- Consume along with food
- TDM after 5 days is recommended

Stable disease after 3-6 weeks

Isavuconazole tab – 200mg tid on day 1-2 & then 200mg/d for 3-6 months
OR
Posaconazole tab – 300mg bid on day 1 & then 300mg/d for 3-6 months (Posaconazole trough level after 3-5 days recommended)

Progressive disease clinically & radiologically

If on amphotericin B
Raise the dose of amphotericin B OR Isavuconazole tab – 200mg tid on day 1-2 & then 200mg/d for 3-6 months OR Posaconazole tab – 300mg bid on day 1 & then 300mg/d for 3-6 months (Monitor posaconazole trough level after 3-5 days)

If onazole
Consider adding polyene; TDM, dose adjustment, drug-drug interaction with azole

Toxicity

1. Shift to azoles, if the patient is on polyene
2. Shift to isavuconazole, if drug interaction with posaconazole

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