complaints of diplopia, pain, edema and conjuctivitis on the right eye. Steroid treatment was started and she was referred to our setting because of total ophtalmoplegia on right eye. In addition to right eye chemosis and edema, eye movements were restricted in all directions with fix-dilated pupilla. Orbital computer tomography was interpreted as preorbital cellulitis. The patient was internalized in the ophthalmology department with piperacilin-tazobactam plus linezolid. After 5 days of treatment control MRI revealed a fungal infection which infiltrated all of the compartments of right eye, right cavernous sinüs plus occludes right internal carotid artery. After this, the patient was transferred to infectious diseases department with the diagnosis of mucormycosis. Piperacillin-tazobactam was switched to meropenem (1gr q8 h i.v.). Also, amphotericin B deoxycholate 1 mg/kg was started but due to allergic reaction, it was changed with LAMB (5 mg/kg/day). Ethmoidal and sphenoidal sinüs biopsies revealed mucormycosis in pathology.

Results: The surgical debridement was not found applicable by surgical departments. The dose of LAMB was increased to 7 mg/kg/day on the 10th day of LAMB. After six days posaconazole (400 mg/day q12 h p.o.) was added due to no clinical improvement.and worsening of the patient's headache. Control Cranial MRI showed progression. Therefore LAMB dose was increased to 10 mg/kg/day and deferasirox was added (20 mg/kg/day p.o.) at the 15th day of treatment and contiunued for 14 days. After that, clinical findings and control cranial MRI stable when compared to previous MRI. On the 30th day of treatment LAMB dose was decreased to 7 mg/kg/day and meropenem plus linezolid treatment was stopped. The patient was discharged with posaconazole after 47 days of LAMB. There was no relapse on 3 month follow-up of the patient with posaconazole treatment which was given 2 months at all.

Conclusion: Combination of antifungal antibiotics with deferasirox may be successful in the salvae tehrapy of mucormycosis.

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Vitamin D deficiency in HIV-infected South Africans: Common, and not associated with susceptibility, immune response, or outcome in HIV-associated cryptococcal meningitis

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Background: HIV-associated cryptococcal meningitis (CM) has emerged as the commonest cause of adult meningitis in much of Africa, and despite current anti-fungal treatments, acute CM-related mortality in the developing world remains between 24-43%. Novel adjuvant therapies aimed at reducing this high mortality are urgently needed. Vitamin D is one such possible adjuvant treatment. Vitamin D deficiency is associated with impaired immune responses and increased susceptibility to a number of intracellular pathogens in HIV-infected individuals. It is not known whether such an association exists with *Cryptococcus neoformans*.

Methods & Materials: Vitamin D levels were measured in 150 patients with cryptococcal meningitis (CM), and 150 HIV-infected controls in Cape Town, South Africa, and associations between vitamin D deficiency and CM examined. Vitamin D levels and cryptococcal notifications were analysed for evidence of reciprocal seasonality. Associations between vitamin D levels and disease severity, immune responses and microbiological clearance were investigated in the patients with CM.

Results: Vitamin D deficiency (plasma 25(OH)D $\leq$50nmol/L) was present in 74% of patients. Vitamin D deficiency was not associated with CM (aOR 0.93, 95%CI 0.6-1.6, p=0.7), but was associated with active TB. Vitamin D levels showed marked seasonality, but no reciprocal seasonality was seen in CM notifications (figure 1). No significant associations were found between vitamin D levels and fungal burden, cerebrospinal fluid tumour necrosis factor-α, interferon-γ, interleukin-6, soluble-CD14 or neopterin levels (figure 2). Rates of fungal clearance did not vary according to vitamin D status.

Conclusion: Vitamin D deficiency does not predispose to the development of CM, or lead to impaired immune responses or microbiological clearance in HIV-infected patients with CM. These data suggest that, in contrast to TB, vitamin D-dependent pathways are not of key importance in the host immune response to cryptococcal infection.

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