

LC-OCT Imaging for Studying the Variation of Morphological Properties of Human Skin In Vivo According to Age and Body area: The Forearm and the Thigh

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ABSTRACT

Mucormycosis as a rare infectious disease mostly affects patients with diabetes. This is a brief review on some important clinical points about this disease which early diagnosis and treatment of it can save patients' lives and prevent severe outcomes.

Keywords: Mucormycosis, Important clinical points, Diabetes

INTRODUCTION

Mucormycosis is a rare infection that mostly affects patients with diabetes. It usually starts at the sinuses and in case of spreading into the orbital cavity or brain structures will cause deformities or serious problems. So, early diagnosis is crucial to prevent adverse outcomes and save the patients' lives [1,2]. Poorly controlled diabetic patients with a recent history of occurrence of ketoacidosis are a common setting in which the infection with mucormycosis can be seen in that. Facial swelling, rhinorrhea, pain, and headache are common complaints of the affected patients. Diabetic patients who are presenting with sinusitis, palate or nasal cavity necrosis, or black eschars, the presence of swelling on their face, cranial nerve palsies, and ocular pathologies like ophthalmoplegia or decreased vision ability should be evaluated for mucormycosis without any delay [3,4]. Tissues fungal elements demonstration is the key to the diagnosis of mucormycosis. In this case, it is necessary to perform a sinus examination and biopsy with the endoscope immediately. Using MRI and CT scanning would determine the disease extension and would be of help in choosing the best treatment strategies for the affected patients.

Treatment of the affected patients is based on two pillars: 1. Surgical removal of dead tissue and foreign materials which should be done without any delay and also with an aggressive debridement manner and 2. Amphotericin B administration, which the lipid formulations are given priority to use nowadays due to their lower renal toxicity side effects in comparison with

the Amphotericin B deoxycholate. In patients who cannot tolerate Amphotericin B, treatment with Posaconazole which is an antifungal agent administered orally may be used. Sometimes Echinocandins can be administered together with lipid formulations of amphotericin B, although this combination should be studied more before recommending for routine use [3,5].

CONCLUSION

Mucormycosis as a problematic infection in patients with diabetes should always be of notice for physicians specifically ones who are dealing with diabetic patients. Diabetic patients whose disease is poorly controlled and have a recent history of ketoacidosis and would present with diseases relevant to sinuses or orbital cavity or brain structures should spark this suspicion in the physician for the presence of mucormycosis and prompt diagnostic actions should be done and in case of confirmation of the disease, immediate surgical and medical treatment should be done in trying to save the patients' lives and prevent the disease from spreading even if the initial findings of the disease would be subtle.

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