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PS1.329 A comparative survey of stratum corneum free amino acids in patients with dermatophytosis and normal subjects S. J. Hashemi Hezave1, M. Velashjerdifarahani2, F. Hashemi Hezave3, H. Bakhshi4 and A. N. Omran5 1Tehran University of Medical Sciences, Food Microbiologh Research Center, Tehran, Iran; 2Hamadan University of Medical Sciences/Dental Faculty, Hamedan, Iran; 3Tehran University of Medical Sciences/School of Pharmacy, Tehran, Iran; 4Tehran University of Medical Sciences, School of Health, Tehran, Iran; 5Islamic Azad University/Tonekabon Branch, Tonekabon, Iran

Background Dermatophytes are a group of fungi that cause infections in keratinized human and animal tissues. Physical and chemical agents can be effective in reveals of dermatophytosis pathogenesis in human which some people are sensitive and some other are resistance to it. Amino acid changes may be a risk factor for infection with dermatophytes in mammals. Methods In the framework of a survey on the comparative changes of free amino acids in stratum corneum in 60 patient

PS2.261 Biocontrol activity of the entomopathogenic fungus Aspergillus niger against Anopheles stephensi, vector of malaria S. J. Hashemi Hezave1, H. Basseri1, M. Velashgerdifarahani2, A. N. Omran3 and M. Berenji4 1Tehran University of Medical Sciences, Tehran, Iran; 2Hamedan University of Medical Sciences, Hamedan, Iran; 3Islamic Azad University/ Tonekabon Branch, Tonekabon, Iran; 4Tehran University of Medical Sciences, School of Health, Tehran, Iran

Introduction Malaria disease is one the most important diseases caused by parasites in all over the world. ‘Mosquito control’ is the control of mosquito-borne diseases through the interruption of disease transmission by killing or preventing mosquitoes from biting humans. The aim was assessment of biocontrol activity of the Aspergillus niger against larvae and adult stages of Anopheles stephensi. Materials and Methods The spores of A.niger was released in rearing water at three dosages of 5 9 105, 109 105 and 15 9 105 spores and we assessed the application methods including topical application of spores on sucrose solution, free exposure to infected culture media and a combination of both. Fungi invasion both in larvae and adults stages was assessed using a three dimensional microscope and taking high resolution photos of them as well as preparation of 10% KOH wet mount from dead bodies followed preparation of tissue sections and staining with hematoxylin and eosin (H&E). Results Three dosages of 5 9 105, 109 105 and 15 9 105 spores respectively yielded 16.0%, 24.0% and 24.0% mortalities compared to 3% mortality in the control group; the differences were significant ($P < 0.05$). Adult emergence was 82.0%, 65.0% and 22.0% respectively at the above dosages compared to 97.0% of adult emergence in control group ($P > 0.05$). The survival rate of treated blood-fed mosquitoes was 10.0% in comparison of 66.0% in control group ($P > 0.05$). Conclusion Based on significant larvae mortality or reduction of adult longevity it is highly recommended to isolate the metabolites from local strain of A.niger which originated of A.dthali caught from south of Iran by Hashemi et al. during 2011. The efficacy of such metabolites should bee determined against malaria vectors at laboratory and field conditions. Disclosure Nothing to disclose