

SURVEY OF SKIN AND NAIL FUNGAL INFECTIONS BY SUBJECT AGE AMONG THAI ADULTS AND THE ETIOLOGICAL ORGANISMS

Sumanas Bunyaratavej¹, Pichaya Limphoka¹, Rungsima Kiratiwongwan¹, and Charussri Leeyaphan¹

¹Department of Dermatology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

Abstract. Dermatophytosis is a common skin problem worldwide. The sites of dermatophytosis may vary by age. In this study, we aimed to determine if there were significant differences in body sites of dermatophytosis by age among older Thai adults and to determine the etiological organisms in order to inform future management strategies for dermatophytoses in Thailand. The study was a retrospective review of the medical records of adults diagnosed with having dermatophytosis at Siriraj Hospital, Bangkok, Thailand during 2014-2016. The etiological agent was also recorded. A total of 7,729 subjects were included in the study; 54.7% ($n=4,231$) males. The mean [\pm standard deviation (SD)] age of study subjects was 61.9 (± 15.4) years. Onychomycosis of the toenails was the most common dermatophyte infection (64.2%, $n=4,960$), followed by tinea pedis (26.3%, $n=2,031$) and tinea corporis (3.7%, $n=284$). The type of dermatophytosis with the highest mean study subject age was onychomycosis of the toenails (63.8 years), followed by tinea pedis (61.6 years) and onychomycosis of the fingernails (56.1 years). Patients with onychomycosis and tinea pedis were significantly ($p<0.001$) older than those with other site fungal infections. *Trichophyton rubrum* was the most common isolated dermatophyte (50.7%), followed by *T. mentagrophytes* (42.0%) and *Microsporum canis* (2.7%). In our study, patients with onychomycosis and tinea pedis were significantly older than patients with other dermatophytes. The most common etiological agent was *T. rubrum*. When Thai adults have been physically examined, the nails and feet should be included due to the high proportion of older subjects with these conditions. Further studies are needed to determine if prophylaxis measures can be taken to prevent these conditions among older Thai adults.

Keywords: tinea, dermatomycoses, prevalence

Correspondence: Dr Charussri Leeyaphan, Department of Dermatology, Faculty of Medicine Siriraj Hospital, Mahidol University, 2 Wang Lang Road, Bangkok Noi, Bangkok 10700, Thailand.

Tel: +66 (0) 2419 4333

Email: charussrilee@gmail.com