An audit of specimens received for superficial fungal studies to the Department of Microbiology, University of Ruhuna

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Introduction
Rising numbers of recalcitrant dermatophytoses have been observed in the recent past along with changes in the pattern of the organisms causing dermatophyte infections. The objective was to audit the clinical diagnosis using direct microscopic and/or mycological culture findings of specimens received from patients clinically suspected with superficial fungal infections.

Methods
Skin, hair, and nail specimens of patients with suspected superficial fungal infections received at the Department of Microbiology, Faculty of Medicine, University of Ruhuna from 1st January 2018 to 31st December 2019 were audited. Demographic, clinical and direct microscopic and culture results obtained from the records were included in the analysis.

Results
A total of 651 specimens were included, 60% of which were from females. The median (Interquartile range) age was 38 years (24 – 52). Clinical details were documented in 319 (49%) request forms. Significant microscopic and/or culture findings were present in 205 of the 651 specimens (31%) of which 63% (130/205) were compatible with documented clinical details while 71/205 were accompanied by request forms with no documented clinical details. Fungal infection of the nails was the commonest documented superficial fungal infection (182/319, 57%) of which 91 (50%) had significant mycological findings. Tinea corporis was the second commonest suspected condition in the study sample (64/319, 20%) with significant microscopic/culture positive findings present in 40 (62%) specimens. Tinea capitis was suspected in 52/319 patients (12%). However only 4 (8%) specimens had significant positive mycological findings. Significant positive direct microscopic and/or culture findings were seen with 8 (25%) of the 32 specimens from patients with suspected tinea pedis and 13 (54%) of 24 specimens from patients with suspected tinea incognito. Dermatophytes were isolated from 31 specimens while positive direct microscopic findings were seen in 320 specimens.

Conclusion
The findings of our audit show that 31% of the specimens had significant positive results. The compatibility of the clinical suspicions with the microscopic and mycological investigation findings was 63% in the studied sample. Nail was the commonest specimen received for superficial fungal studies with significant microscopic and culture findings in 50% of them.

Keywords: Audit, Dermatophytosis, Sri Lanka.