

PS-C4.

**THE POSSIBLE HAZARD OF PIGEON DROPPINGS ON THE STAFF OF THE
FACULTY OF DENTAL SCIENCES, UNIVERSITY OF PERADENIYA,
SRI LANKA**

G.J. PANAGODA AND M.R.D.M. SENANAYAKE

*Division of Microbiology, Faculty of Dental Sciences,
University of Peradeniya, Sri Lanka*

C. albicans is the predominant agent causing candidosis in man (Samaranayake and MacFarlane, 1990). It is widely distributed in nature and has invaded a diverse habitat (McGinley et al. 1988).

There are pigeons in large numbers in the vicinity of Faculty of Dental Sciences of University of Peradeniya, Sri Lanka and there have been no previous studies to evaluate the presence of *Candida* species in their droppings. Therefore, the current study was designed to isolate and identify the *Candida* species in such droppings.

The pigeons, nesting under the eaves of the building housing the Service Laboratory, Biochemistry, lecture theatres and reading room of the Faculty of the Dental Sciences were selected for the study. A total of ten nesting sites were selected for the collection of pigeon droppings. These specimens were streaked onto antibiotic supplemented Sabouraud's Dextrose Agar (SDA) and were incubated at 37 °C for 24 – 48 hrs for the growth of *Candida*. Gram stain was performed on suspected colonies for the presence of *Candida*. Thereafter, the organisms were identified by the conventional germ tube test and by growing on Chromo slants (*Candida* identification system, Kanto Chemicals Tokyo, Japan).

When the droppings were analysed for the presence of *Candida*, a total of nine isolates were detected. The germ tube test demonstrated the presence of two *C. albicans* isolates and seven non-*albicans* isolates. When grown on Chromo Slants, the non-*albicans* were identified as *C. glabrata* (2), *C. krusei* (3), *C. tropicalis* (1) and an isolate of *C. parapsilosis*.

Candida species are common opportunistic pathogens frequently isolated from human and non-human sources (Davenport, 1970; Greaves et al. 1992). Previous studies have demonstrated outbreaks of fungal infections among humans due to the presence of pigeons (Greaves et al. 1992). Further, they have demonstrated the association of emerging fungal pathogens such as *C. parapsilosis* in these infections

The current study has revealed non-*albicans* as the dominant isolate in the pigeon droppings. Hence, this study for the first time highlights the possible danger of non-*albicans* associated outbreak of candidosis among the academic and non-academic members of the Faculty of Dental Sciences. Further studies will be needed to ascertain the carriage of non-*albicans* among the Staff of the Faculty of Dental Sciences of University of Peradeniya.