

# IDENTIFICATION AND ANTIBIOTIC SUSCEPTIBILITY OF AEROBIC BACTERIAL FLORA COLONIZING CHRONIC FOOT ULCERS OF PATIENTS ADMITTED TO GENERAL SURGICAL WARDS IN TEACHING HOSPITAL KANDY

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Though mortality seems to be low, patients with chronic wounds suffer immensely. In a given time, as many as 25 to 30% of patients in general surgical wards have chronic wounds. Patients with chronic wounds often have some sort of mental disturbance as a consequence of their disease state. This study was conducted to identify the type of aerobic microbial flora which colonize chronic wounds and their antibiotic susceptibility of patients in three general surgical wards in Teaching Hospital Kandy. Two sets of swabs were taken from each patient, before and after cleaning the wound with sterile normal saline. Each specimen was subjected to Gram staining and cultured on to routine laboratory culture media and to two types of chrome agars. Identification of all isolates were done up to genus or species level depending on the colony appearance on chrome agar and biochemical characteristics. In specimens obtained following cleaning with sterile normal saline, an average of four isolates per specimen were recovered. Antibiotic susceptibilities of all isolates recovered from samples collected after cleaning were performed according to CLSI methodology.

Hundred eligible adult patients (60 males and 40 females) were included in the study. Mean age of the study population was 56 +/- 10.72 with a range of 48 to 94. The most common Gram positive organism isolated was *Staphylococcus aureus* (10) and all were methicillin resistant. Gram negatives were divided as non-lactose fermenters and lactose fermenters, the non-fermenters were *Pseudomonas* spp. (80) and *Acinetobacter* spp. (12). Lactose fermenters were *Klebsiella* spp. (45), *Escherichia coli* (28), *Proteus* spp. (27) and unidentified coliforms (40). 7.7% of *Pseudomonas* spp. was found to be resistant to all antibiotics tested (ceftazidime, ciprofloxacin, gentamicin, ticarcillin-clavulanic acid, piperacillin-tazobactam). There were considerable changes in numbers and types of bacteria before and after cleaning.