

## Bacteriology of non-surgical wound infections in Ibadan, Nigeria.

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### Summary

Previous studies done on wound infections in this environment had been mostly on the surgical variety rather than the non-surgical. However, few studies available on the non-surgical type have indicated that changes do occur in the pattern and antibiogram of the bacterial isolates of these non-surgical wound infections. This study was therefore designed to investigate the bacteriology of non-surgical wound infections in this environment. A retrospective review of seven hundred and fifty four cases of non-surgical wound infections was conducted between September 2002 and February 2005 at the University College Hospital, Ibadan, Nigeria. A total number of 871 bacterial, and seven fungal isolates were obtained from these wound cultures. In 477 (70.3%) cases, cultures were monomicrobial and 202 (29.8%) polymicrobial. *Staphylococcus aureus* (38%) was the predominant pathogen, followed by *Pseudomonas aeruginosa* (18.7%), *Klebsiella* species (17%), *Escherichia coli* (10.6%), *Proteus* species (7.4%), *Staphylococcus epidermidis* (4.4%), *Streptococcus* species (1.6%), *Enterococcus faecalis* (1.4%), and *Candida albicans* (0.8%). High rates of antibiotic resistance were recorded among these isolates. 53.4% of them were sensitive to ceftriaxone, 42.5% to gentamycin and 39.3% to ofloxacin. This high antibiotic resistance gives credence to the value of determining the antibiogram of these pathogens in their management. Continuous interaction between the wound care practitioners and microbiology department is also advocated.

**Keywords:** Wound, non-surgical, infections, antibiogram

### Résumé

Cette étude était faite pour investiguer la bactériologie des blessures non chirurgicales dans cet environnement. Une revue rétrospective de sept cent cinquante-quatre cas non chirurgicales des infections conduit entre septembre 2002 et février 2005 au centre hospitalier universitaire d Ibadan, Nigeria. Un total de 871 bactéries et 7 isolats de fungi étaient obtenus des cultures. 477(70,3%) des cas cultivés étaient non microbiaux et 202(29,8%) polymicrobiaux. Le *staphylocoque aureus* (38%) était le pathogène le plus prédominant, suivi de 18,7% de pseudomone aeruginosa (18,7%), 17% d'espèce Klebsiella, 10,6% d'Escherichia Coli,(7,4%) d'espèce proteus, (4,4%) de staphylocoque epidermidis,(1,6%) d'espèces streptocoque,(1,4%) d' *enerocoque faecalis*, et (0,8%) des candidas albicans. Des taux élevés de résistances d antibiotiques étaient enregistrées parmi les isolats, 53,4% étaient sensibles au ceftriaxone, 42,5% à la gentamicine et 39,3% à l' ofloxacine. Le taux élevé de résistance donne une crédence à la valeur déterminant l'antibiogramme de ces pathogènes dans leurs soins. Les interactions continues entre les personnels et le département de microbiologie dans les soins effective des blessures sont encouragées.

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