

Prevalence of Pathogenic Bacteria in Open and Surgical Wounds of Patients Attending Hospitals in Buea Municipality

Authors : Bruno Langdji

Abstract : Wound infections often cause harmful and costly clinical complications to our health care systems. Infected wounds impose a significantly negative effect on patient care and recovery as infection hinders wound healing, resulting in increased patient morbidity and mortality. We screened 212 wound specimens from patients in some health institutions in Buea municipality and analyzed for common bacteria pathogens using standard microbiological and biochemical methods. Antimicrobial susceptibility of isolates was determined using the disc diffusion assay. A total of 169 (79.9%) samples were infected. The frequencies of isolation from various sources were as follows; Burns 100%, Ulcers 86.7%, Postoperative wounds 79.3% and Open wounds 78.8%. Twelve bacteria species were identified: *Staphylococcus aureus*, *Escherichia coli*, *Enterobacter cloacae*, *Enterobacter aerogenes*, *Proteus mirabilis*, *Klebsiella pneumoniae*, *Hafnia alvei*, *Pseudomonas aeruginosa*, *Serratia marcescens*, *Serratia rubideae*, *Serratia sakazakii* and *Streptococcus* sp. Results of antibiotic sensitivity tests revealed the most active drugs against these infectious agents to be ofloxacin (100%) and perfloracin (100%), followed by ceftriaxone (94.2%) and gentamicin (92%). Isolate exhibited complete resistance to oxacillin (100%). Multi-drug resistance (resistance to five or more drugs) was exhibited by over 71.7% of isolates. Multi-drug resistance was commonly encountered in *Staphylococcus aureus*, with 31.5% of this organism being resistant to seven drugs.

Keywords : wound, bacteria, drug, patient

Conference Title : ICBID 2025 : International Conference on Bacteriology and Infectious Diseases

Conference Location : Paris, France

Conference Dates : June 26-27, 2025