

L0060 Bacteriological profile of wound infection in the patients attending a tertiary care hospital and screening of mrsa

Sujana Pokharel*¹

¹ Central Department of Microbiology, Tribhuvan University, Kirtipur, Nepal

Background: Wound is a breach in the skin with the disruption in the epithelial integrity of skin providing a favourable substratum for microbial colonization and proliferation. Wound infection if not diagnosed properly, will contribute to delay wound healing and other life threatening diseases. The aim of this study is to determine the bacterial isolates predominant in wound infection and to assess their antibiotic susceptibility pattern.

Materials/methods: A cross-sectional study was carried out from June to December 2017 at KIST Medical College and Teaching Hospital, Imadole, Lalitpur. A total of 372 wound samples were processed including pus swab, wound swab, aspirates and ear swab. For confirmation of Methicillin Resistant *S. aureus* (MRSA), ceftioxin disks diffusion tests were performed phenotypically.

Results: The overall prevalence of wound infection was found to be 43%. Among 160 growth positive bacterial isolates, altogether 12 different bacterial species were isolated with *Staphylococcus aureus* being the predominant one (82.5%) followed by *Pseudomonas aeruginosa* (22.8%), *Escherichia coli* (21.1%), *Acinetobacter* spp. (17.5%), *Klebsiella pneumoniae* (17.5%), *Proteus mirabilis* (12.3%), Coagulase Negative *S. aureus* (CONS) (8.7%), *Streptococcus* spp. (8.7%), *Citrobacter* spp. (5.3%), *Klebsiella oxytoca* (3.5%), *Enterobacter* spp. (1.8%) and *Serratia* spp. (1.8%). Out of 85 *S. aureus* isolates 40 (47.1%) were confirmed as MRSA which indicated the increasing rate of MRSA in wound infection.

Conclusions: Proper and rational use of antibiotics helps to minimize the infection rate to some extent.



