ABSTRACT

The present study was conducted identification of the prevalence of microorganisms in nasal samples taken from different localities of Lahore, Pakistan. The antibiotic susceptibility was examined to check the resistance and sensitivity of these microbes towards different antibiotics. These samples showed that the most abundant bacteria were *Staphylococcus aureus* with a prevalence rate of 78.87 % while that of *Staphylococcus epidermidis* was 16.9 %. Other bacteria belong to Proteus and Bacillus spp. Multi drug resistance was observed in *Methicillin resistant Staphylococcus aureus* (MRSA) as well as in *Methicillin Sensitive Staphylococcus aureus* (MSSA). The strain of *Staphylococcus aureus* 98.21 % was resistant to penicillin which is the highest rate while 89.28 % resistance was observed in this study towards erythromycin. A range of resistance was observed with different antibiotics used in this study and the minimum resistance rate was obtained toward ciprofloxacin in *Staphylococcus aureus* which is 1.78 %. This study depicts the general picture of *Staphylococcus aureus* colonization in nasal tracts of human population belonging to different areas of Lahore.