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The Emergence of Multiple Antibiotic Resistance in Culture Sensitivities of Post-surgical Patients in a Tertiary Care Hospital, Lahore**Muhammad Hassan Shahid***Lahore General Hospital, Lahore*

Antimicrobial resistance (AMR) is a growing public health concern where the microorganism is able to survive exposure to antibiotic treatment. There are multiple reports about the emergence of antibiotic resistance from different countries including the US, Brazil, India, Jordan. These reports include vancomycin-resistant *Staphylococcus aureus* and vancomycin-resistant *Enterococci*. Controlling infections is one of the toughest jobs in developing countries like Pakistan where AMR in surgical site infections still holds high mortality and morbidity. We conducted an observational study for a period of six months. The data regarding culture and sensitivity of the organisms isolated from different sources such as blood, wound swab/pus, urine other sources such as sputum or tips of CVPs were collected. 195 culture sensitivity reports were included from the patients. Out of these, 124 showed significant growth of organisms exhibiting resistance to either single or multiple drugs. *Escherichia* and *acinetobacter* was the most common organism isolated with a total of 30 each (24%, 24%), followed by *pseudomonas* 21 (17%), *Klebsiella* was 13 (10%), *Proteus* was 10 (8%), *Methicillin*-resistance *Staph-aureus* was seven (5%), *Methicillin*-sensitive *Staph-aureus* was five (4%), *Staphylococcus epidermidis* was four (3%), *Providencia*, *Streptococci*, *Enterobacter* species and *Citrobacter* species were one (1%). Maximum resistance was detected with frequently used first-line antimicrobials such as Ceftriaxone, ampicillin and Clavulanic acid. Least resistant were Azithromycin, Cefoxitin, Cefaclor among the gram-negative and gram-positive bacteria. This concludes that antimicrobial resistance (AMR) was more against frequently used antibiotics that are accessible for an extended duration. Variation of resistance and sensitivity pattern with time is identified. Periodic AMR monitoring and rotation of antibiotics are suggested to restrict further emergence of resistance.

Biography

Dr. Muhammad Hasaan Shahid is a Post Graduate Resident (Final Year) of MS General Surgery at Lahore General Hospital Lahore, Pakistan. He has published different articles and currently working on variety of fields of work including Trauma Surgery, Combating multi drugs resistance bacteria as well as minimal invasive surgery.