AB21

Commonly isolated pathogens and Antibiotic susceptibility testing in patients with decubitus hospitalized at a tertiary care hospital in Stip [#207]

Tijana Serafimovska¹, Milka Zdravkovska², <u>Verica Ivanovska²</u>, Marija Darkovska-Serafimovska², Jasmina Tonic Ribarska¹, Trajan Balkanov³

¹Faculty of Pharmacy, University "St. Cyril and Methodius" – Skopje, North Macedonia; ²Faculty of Medical sciences, University "Goce Delcev" – Stip, North Macedonia; ³Faculty of Medicine, University "St. Cyril and Methodius" – Skopje, North Macedonia

Background: The increasing rates of hospital infections, plays an important role in the development of chronic, delayed wound healing. Bacterial resistance and multidrug resistance to commonly used antibiotics have created a great problem in the management of different infections. The aim of this study was to identify isolated pathogens from swab samples in patents with decubitus, taken at a tertiary care hospital in Stip and to determine microbial susceptibility to antibiotics.

Methods: The colonies grown were identified based on colony morphology, Gram stains and biochemical tests. Antimicrobial susceptibility testing was performed by Kirby–Bauer disc diffusion technique.

Results: All suspected swab samples taken from patients with decubitus were processed, and all samples (100%) were culture positive. The most common isolated gram-positive bacteria was *Staphylococcus aureus*, among which 50% contained MRSA and other 50% were found to have multidrug resistance to penicillin, macrolides, cephalosporines, clindamycin, folate synthesis inhibitors and quinolones.

Conclusion: Our study is the first surveillance study that examined the antimicrobial susceptibilities in patients with decubitus hospitalized at clinical for tertiary care in Stip. The rate of isolated pathogen (methicillin resistant *S. aureus*) was found to be high and requires additional activities and measures to be taken to improve the clinical outcome of patients.