

PREVALENCE OF METHICILLIN – RESISTANT *STAPHYLOCOCCUS AUREUS* AND *STAPHYLOCOCCUS EPIDERMIDIS* IN PATIENTS WITH DIABETIC FOOT ULCERS: FOCUS ON THE DIFFERENCES BETWEEN SPECIES ISOLATED FROM INDIVIDUALS WITH ISCHEMIC VERSUS NEUROPATHIC FOOT ULCERS

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We have examined whether foot ischemia or neuropathy with diabetic foot ulcer (DFU) promote selection of staphylococci species, evaluated frequency of MRSA and MRSE among strains yielded from patients with DFU and assessed multidrug resistance of isolates.

Patients with DFU and foot osteomyelitis were divided into ischemic foot ulcer (IFU, n=21) and neuropathic foot ulcer (NFU, n=29) group according to peripheral sensory neuropathy and arterial perfusion assessment. Results. Frequency of *S.epidermidis* yielded from curettage of IFU was higher compared with NFU (P<0.05).

S.epidermidis was also more frequently isolated from the toe web surface of patients with IFU compared with NFU (55% vs.17.9%, respectively) and healthy volunteers (HV, n=20) (17.6%, P<0.05). These mostly MRSE strains (83.3 to 100%) originated from DFU patients were multidrug resistant (88.8%). Also, most of MRSA isolates were multidrug resistant (70.3%). Higher rates of MSSA from DFU patients were resistant to antimicrobials compared with MSSA from HV. This is the first report indicating that diabetic patients with IFU differ in higher frequency of *S.epidermidis* infection of ulcer and skin colonization compared with NFU patients. We suggest that IFU should be defined as separate disease state of DFU and *S.epidermidis* should be appreciated as nosocomial pathogen.