## TITLE: SUSCEPTIBILITY PROFILE INVESTIGATION OF MICROORGANISMS ISOLATED IN COMPLEX WOUND OF PATIENT COMMUNITY

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## ABSTRACT:

Pressure ulcers are common, costly, and debilitating chronic wounds, which occur preferentially in people with advanced age, physical or cognitive impairments, and multiple comorbidities. Our aim was to investigate the presence of multiresistant microorganisms in patients with complex wounds. We collected samples from 12 patients were treated at health center in the city of Alfenas-MG. Among these, 7 (58.33%) were female and 5 (41.67%) male. Only 11 (91.67%) had positive culture for microorganisms. Three lesions were present in one patient (8.33%), 2 in four (33.33%) and 1 in 7 (58.34%). Staphylococcus were tested OXA, PEN, AMP, AZI, ERI, CZ, SUT, VAN, CLO and TEC. Six were isolated S. aureus and 3 (50%) of 3 different lesions from the same patient. All (100%) were resistant (R) PEN and AMP and sensitive (S) VAN. The resistance reached 83.34% in OXA, AZI, ERI, CZ and CLO, the same rate was S for TEC. Among the four S. epidermidis isolates 100% were S to TEC, VAN, AMP, SUT and CZ; 75% S to OXA and CLO; the same rate R to PEN and ERI and AZI 50%. For BGN were tested IMP, AMI, CPZ, CRO, CIP, CAZ, TET, CLO, SUT and TAC. They were isolated two strains of *E. gergoviae* (50% R to CLO, TET and CIP and 100% S to the other) and one of *P. agglomerans* (R just CIP and CAZ) and *C. freundii* (S to all and R to SUT). Three species of Klebsiella were identified: K. pneumoniae (S only TAC and CPZ) and K. ozaenae (S only TAC) 1 each and 2 K. oxytoca (100% S IMP, CLO, CIP, CPZ and TAC; 50% S AMI, CRO, SUT, CAZ and TET). Two A.calcoaceticus were isolated, one S to all tested drugs (CIP, TAC, IPM, CRO, CAZ, SUT, AMI, CLO, TET, GAT) and other R to CIP. Pseudomonas fluorescens (2 strains) were I (intermediary) to TAC, R CPO, CFP, LMX, ERT and CAZ, 1 strain I to IMP and CPM and other R. One Candida sp. was isolated of patients with K. pneumoniae and S. epidermidis. It was observed that the susceptibility profile found in strains of Klebsiella, S. aureus and Pseudomonas are similar to hospital environment isolated strains, confirming that multidrug resistant microorganisms was initially isolated only in the hospital environment, and now strikes healthcare center patients.

**KEY-WORDS:** Complex wounds. Healthcare center patient. Susceptibility profile.