658 - MICROBIAL BURDEN, PAIN, INFLAMMATION, STRESS, AND DELAYED WOUND HEALING: COHORT STUDY

Tipo: POSTER

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Aim: to analyze the relationships between microbial burden, wound-related pain, inflammation, and their impact on stress and healing in patients with hard-to-heal wounds. Method: prospective cohort study, approved by ethics committee, including 41 adults, with leg ulcers (63.8%), followed up from two to eight appointments at an outpatient clinic, after informed consent was obtained. REDCap® was used for data collection with the Bates-Jansen Wound Assessment Tool (BWAT) for healing, and the Perceived Stress Scale. Brief Inventory of Pain, McGill Pain Questionnaire, and Neuropathic Symptom Rating Scale for pain. The LOWER and UPPER checklist, with thermography; fluorescence UV light to visualize areas of >104 CFU/g of bacteria, guiding the biopsies locations for microorganisms detection. inflammatory mediators (IL-1?, IL-10, TNF-?) were identified in wound fluid samples, through ELISA. Results / discussion: mean BWAT score was 23.2 (SD 9.8), drecreasing 3.2 points throughout consultations, however, 21.3% remained in delayed wound healing. Mean stress score was 23 (SD 10) and decreasing 3 (SD 12) points. Correlation analysis ($p<.01$) showed strong relationship between number of isolated bacteria and pain during dressing changes ($r=.720$). TNF? inflammation indicator was moderately correlated to neuropathic pain ($r= -.422$). BWAT had low correlation with McGill number of pain descriptors ($r= -.234$). Stress was low correlated to pain after procedures ($r=.457$), BPI Sensitivity ($r=.436$), and pain now ($r=.407$). Conclusion: stress and healing were correlated with pain, identifying its assessment as potential predictor for hard-to-heal wounds and the patient experience.