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Effect of ozonation coconut oil on healing process of skin pressure ulcers.

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Background, Motivation and Objective. The ulcers are skin lesions due to increased external pressure, usually over a bone prominence, in some cases can be difficult healing. The ozone can be an alternative treatment due to the antimicrobial, stimulating new blood vessels, increasing the local irrigation, accelerating the formation of granulation tissue and healing. The objective of this study was to evaluate the effect of the ozonation coconut oil in the topical treatment of pressure ulcer.
Methods. The Research Ethical Committee approved the research. Participated in these study 16 volunteers with pressure ulcers, both sexes, age 30-70 years. For ethical reasons the topical medicines prescript was not suspended. The volunteers were randomly divided into: control group (n=8): curative (collagenase); treatment group (n=8): curative (collagenase) and ozone associated with coconut oil. The curatives were changed periodically and morphological and microbiological qualitative evaluations performed in 0, 7th, 14th and 21th days.
Results. In the control group were isolated in the baseline and 21th day the same microorganisms (*P aeruginosa, C albicans, P mirabilis, E coli*, *S aureus, Salmonella sp)*. In the treatment group in the 21th day were isolated in one wound *P aeruginosa,* in nine *C albicans,* in two *E coli,* none wound showed *Salmonella sp and S aureus.* The qualitative evaluation demonstrate the effectiveness of ozonation coconut oil as the coloration of the ulcers, denoting the action of fibroblasts on formation of new tissue; as well as angiogenesis by red colored aspect, denoting the presence of granulation tissue and advanced healing process in the treated ulcers.
Discussion and Conclusions. These results showed the benefit of the ozonation coconut oil, how a safe and easy technique, useful to treatment of skin lesions, thereby reducing the costs to the treatment and bringing an improvement in the quality of life of the patient.

Keywords. pressure ulcers, coconut oil, ozone, healing.