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**CLINICAL REPORT ABOUT A NANOTECHNOLOGICAL MEDICAL DEVICE ON A BASE OF TITANIUM BIOXIDE AND SILVER WITH A LIQUID SPRAY DISPENSER**

**Roberto Cassino**<sup>1</sup>, Annamaria Ippolito<sup>1</sup>, Paolo Cuffaro<sup>1</sup>.

<sup>1</sup>*Vulnera - Italian Vulnological Center (Turin, Italy)*

**Introduction:** Nanotechnologies can be the “new frontier” in wound care and represent a very important innovation, especially in the management of infected wounds.

**Aim of the work:** Demonstrate the effectiveness of a new product whose mechanism of action is to form an antimicrobial barrier that allows the creation of the best microenvironment for the tissue regeneration.

**Methods:** The study involved 20 patients with colonized/infected ulcers (Cutting & Harding criteria). The treatment protocol provides only local treatment (dressings) and not a general concomitant antibiotic therapy. The dressing consisted of applying a small amount of the product on the lesions, after cleansing with dry gauze or moistened one with normal saline solution; moist gauzes as secondary dressing. The renewal of the dressing was provided every 48 hours. The effectiveness evaluation was based on the removal of clinical signs of infection and area reduction/healing of the wounds, after an observation period of 6 weeks.

**Results:** The results showed effectiveness (removal of the signs of colonization/infection) in 100% of cases, with a mean area reduction of about 76%. Among other things, are to be reported a case of healing within 5 weeks and another one within 25 days.

**Conclusions:** The product confirmed effectiveness, going beyond the level of «healing power», showing in fact a considerable acceleration of epithelialization time. It also showed appreciable ease of use and comfort; no patients have complained of pain to the application.