

*Abstracts of the Scientific Awards of XXXIX COMU 2020 - Research Classified -  
Panels Award - Primary Health Care*

## **Treatment of Diabetic Feet With Ozone Therapy in Primary Health Care**

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**Introduction:** The ozone therapy is a therapeutic practice by ozone administration for the purpose of mainly assisting in disinfection and healing of extensive wounds through increased tissue oxygenation. It is possible to observe ulceration in the feet because of diabetes mellitus, a chronic disease affecting more than 120 million people worldwide. Therefore, the application of ozone therapy as an integrative practice in primary health care is valid, since that practice is presented as a supporting in the treatment of these injures, as well as its low cost.

**Objectives:** The study aims the treatment of diabetic foot injuries through the ozone therapy, as well as its cost-benefit, focusing on the primary health care application at Brazil's Unified Health System (SUS), in order to provide a less invasive, humanized and easily accessible treatment to diabetics patients, increasing their life quality.

**Methodology:** A bibliographical research was conducted with general concepts about ozone therapy and diabetes, by databases of free access available online, through the following keywords: ozone therapy, diabetes, ulcer, healing, integrative medicine, primary health care, diabetic foot, complementary therapies. Relevant scientific articles developed between 2010 and 2020 were selected.

**Results:** Diabetic patients present a greater chance of developing ulcer because of ceaselessly oxidative stress over cells. Ozone therapy provides promising prognosis being ozone activate the cellular metabolism inducing antioxidant enzymes synthesis which suppress the oxidative stress by increasing the oxygen supply to affected tissues, that provides its bactericidal and fungicidal behavior. Besides, it stimulates neovascularization and tissue proliferation, consequently, occurs an inflammation and pain decrease. Finally, ozone therapy promotes cost in 20% to 80% decline comparing to procedures generally administered.

**Discussion and Conclusion of the Results:** Ozone therapy speed up wound healing in patients with diabetic ulcers and admit a better life quality for them as well as avoiding amputations, which enable its inclusions as a medical procedure in this case. Those benefits justify why ozone therapy is recommended by health policies planning to SUS, because it is a technique easily applied at primary health care. In addition, it is supported by the National Policy on Integrative and Complementary Practices which facilitate its implementation at care and prevention actions developed by the Family Health Strategy, since it is the mean of treatment for diabetic patients in a longitudinal and continual form. Primary Health Care requires practicality, efficacy and good cost-benefit, and ozone therapy is a viable alternative for the treatment of diabetic foot.

**keywords:** Ozone therapy; Diabetes; Ulcer; Healing; Integrative medicine; Primary health care; Diabetic foot; Complementary therapies.