Ozone therapy in the management of cancer-treatment toxicity [abstract]

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Purpose: This presentation will be focused to show clinical and preclinical works using Ozone therapy in the management of side effects related to cancer treatments

Material and methods: Published articles and our experience about the potential beneficial effects of Ozone therapy in different adverse events related with cancer treatments.

Results: Clinical experiences have shown that Ozone therapy can decrease or avoid delay in the commencement of Radiotherapy and Chemotherapy in patients with delayed wound-healing after cancer surgery. These delays could lead to increased risk of tumor relapse.

Clinical studies have shown the success of Ozone therapy to treat different side effects of Radiotherapy, Chemotherapy and Surgery. In our institution Ozone therapy was used to treat: delayed healing after chemotherapy extravasation, radiation-induced dermatitis, fistula and fibrosis after cancer treatments, radiation- induced side effects such as: delayed-healing, vaginitis, cystitis, proctitis, brain injury. Other institutions have also described beneficial effects of Ozone therapy in the treatment of mucositis, wound infections or bisphosphonate-related jaw osteonecrosis in cancer patients

Finally, several preclinical studies have shown "protective" effect of Ozone preconditioning against selective toxicity induced by different chemotherapy drugs and radiation. These works suggest potential clinical application to prevent toxicity.

Discussion and Conclusions: Several studies support the potential role of Ozone therapy as complementary treatment to avoid delay in the commencement of Radio-Chemotherapy and prevent or treat some side effects of cancer-treatments. However, as it happens with hyperbaric chambers and other more accepted therapies, well addressed clinical trials are required for a definitive demonstration. Meanwhile, our work with Ozone therapy looking for the improvement of quality of life and/or symptom management has to follow an appropriate information to cancer-patients.