O3 (OZONE) AS AN ALTERNATIVE THERAPEUTIC AGENT IN CHRONIC KNEE OSTEOARTHRITIS

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Background

O3 gas, discovered in the mid-nineteenth century, is a molecule consisting of three atoms of oxygen, with a dynamically unstable inflammatory and analgesic action.

Aim

To demonstrate the effectiveness of ozone therapy on elderly patients with chronic knee osteoarthritis.

Materials and Methods

Population

- 20 patients, men and women between the ages of 75-90, with an ASA OF III-IV.
- The patients were high risk for total hip replacement (THR).
- Their main treatment for pain relief was anti-inflammatory drugs without complete relief of symptoms.
- All patients had a Visual Analogue Scale (VAS) of >8 from the first visit.

Methods of treatment

- All patients were implemented with the international protocol of 15 sessions, 2 days a week, local intraarticular injection of O3/O2, 5-10 UG/ml O3/O2.
- The ozone devise was MULTIOSSIGEN.

Data recorded

- The change of pain intensity
- The side effects of the medication

Results

A paired-samples t-test was conducted to compare pain reports in patients before and after the ozone treatment. There was a significant difference in the scores for before ($M=8.95$, $SD=.76$) and after ($M=5.65$, $SD=1.36$) with a mean difference of almost 3 points; with $t(19)=9.9$, $p < 0.0001$.

Conclusions

Treatment with ozone seems to be an effective alternative for the symptomatic treatment of chronic knee osteoarthritis, especially in patients with high risk morbidity for THR. Effects are shown to be consistent, safe and with minimal and preventable side effects.

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