

Effectiveness of Intra-Discal Ozone Therapy in the Treatment of Low Backache

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Background

Ozone therapy has shown promising results due to its analgesic, anti-inflammatory & immunomodulatory effects in treating lumbar disc herniation (LDH). As such, little data is available regarding the efficacy of ozone in Indian literature, evincing its low prevalence despite its numerous advantages. Thus, we aim to study the effectiveness of intra-discal ozone therapy in reducing pain & disability in patients of LDH.

Aims & Objectives

To study the effectiveness of intra-discal ozone therapy in the treatment of low backache.

Material & Methods

A retrospective study was carried out at a tertiary care hospital. Case files of fifty-five adult patients in the age group of 20 to 65 years, who were treated with oxygen-ozone therapy following complaint of low back pain, were collected and analyzed. The clinical outcome was assessed by the follow-up data, pursued after 48 hours, 4 weeks and 6 months of treatment by applying the modified MacNab method and Visual Analog Pain Scale (VAS) scoring. Statistical Analysis was performed by paired student t test.

Results

52.7% patients belonged to the age group of 40-59yrs and 80% were male. 30.90% suffered from co-morbid conditions, predominantly hypertension (14.54%). Level of disc involvement was L4-L5 in 54.54%, followed by L3-L4, L5-S1 and multiple discs. Pre-ozone assessment of VAS score revealed moderate pain in 38.18% patients, severe in 52.72% and excruciating pain in 9.09% patients. Significant difference was found in the mean VAS score on all follow-ups. On evaluating the therapeutic effectiveness, based on MacNab's criteria, 63.6% patients showed complete recovery, 9% had significant relief and 27.4% had no improvement.

Conclusions

The level that was found more prone for disc prolapse was L4-L5. The most common cause of LDH was found to be lifting heavy weights. There was significant improvement in most patients who failed to respond to conservative therapy after ozone therapy, both in pain and disability. Intradiscal oxygen-ozone, thus, proved to be a safe & cost-effective therapy in treating LDH.