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## [Ozone therapy in lumbar sciatic pain]

[Article in Italian]

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**INTRODUCTION:** Medical ozone is a mixture of oxygen and ozone which can be used for several medical applications. Ozone was first applied clinically to the treatment of lumbar sciatic pain peridurally, while Pietrogrande was the first in Italy to report on its intradiscal administration to treat nucleus pulposus herniation. On account of these considerations, we have decided to introduce this method in our Institute (I.C.O.T. Latina) as an alternative to surgery in the treatment of lumbar sciatic pain supported by an intradiscal hernia. **MATERIAL AND METHODS:** September, 1995, to April, 1997, we treated more than 1000 patients with intradiscal ozone infiltration. We prospectively analyzed the first 50 patients, with 6 months' follow-up at least; all of them were preliminarily submitted to clinical examination, electromyography, CT and MRI. After local anesthesia, we injected the disk, with 18-20 G needles and under CT or fluoroscopic guidance, with 12 ml of a mixture of oxygen and ozone at a concentration of 20-30 micrograms/ml. The treatment was repeated two or three more times at intervals of 3, 15 or, when necessary, 30 days. After each treatment, CT follow-ups were carried out and the final follow-up was made 3 months later. **RESULTS:** We divided our results into clinical and instrumental. As for clinical response, we had 68% positive results (40% excellent, 28% good) and 32% negative results (10% of patients underwent surgery and 22 are under medical and physical treatment). As for CT response, we had 82% positive results (36% excellent, 46% good), while no major changes between pre- and post-treatment CT findings in the remaining 18% of cases. **CONCLUSIONS:** Ozone therapy, thanks to its ease of execution and noninvasiveness, permits the successful outpatient treatment of lumbar sciatic pain. Moreover, the lack of major complications and the good results obtained compared to other methods, such as chemonucleolysis, percutaneous automated discectomy, microsurgery and conventional surgery, suggest that ozone therapy can be considered the treatment of choice for lumbar sciatic pain and a valid alternative to surgery in many cases.

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