

OZONE THERAPY IN SUPPURATIVE CHRONIC MIDDLE EAR DISEASE.
R.A. Durañona, S. Menéndez1, O.E. Rivero, A. Nieves.
Dr. Ernesto Guevara de la Serna General Hospital, Faculty of Medicine, Las Tunas Province, Cuba.
1Ozone Research Center, Cuba.

The persistent inflammation of the middle ear adopt several forms owing to anatomical, physiological and bacterial factors. Patients with this disease suffer of continuous ears infections or relapses, presenting most of them a hearing loss, in relation with an injury in the sound-transmitting mechanism and a cochlear damage by toxicity or a direct propagation of the infectious process. The aim of this study is to evaluate the effectiveness of ozone therapy in patients maintaining suppurative chronic middle ear disease after conventional medical treatment and regional surgery. A clinical trial was performed in 17 out-patients coming from external otorrhine office of Guevara Hospital and Mártires de las Tunas Hospital, between March and December/96. Patients received a cycle of treatment consistent in 15 sessions of rectal ozone applications, with an ozone concentration of 50 mg/L, and also installation of 2 drops of ozonized oil (OLEOZON) for 12 hours in each ear during 15 days. This cycle of treatment is repeated 3 months later. The results demonstrated that 16 patients (94 %, $p < 0.05$) had negative bacteriological study at the end of the second cycle of treatment. Only in one patient remained septic conditions (pseudomonas + proteus). The otoscopy showed 10 patients (59 %) with tympanic membranes completely recovered and in 7 patients still remained a little point without epithelization. According to audiometry, 14 patients (82 %, $p < 0.05$) improved their hearing loss. Mastoid X-ray studies demonstrated improvement in 13 patients (76 %). It is concluded that ozone therapy is effective in the treatment of suppurative chronic middle ear, without any side effect.