

POTENTIALITIES OF NO-THERAPY IN TREATMENT OF MIDDLE EAR DISEASES

G. A. Golubovskiy, E.A. Shevchik, O.A.Nosova, , A.N.
Nasedkin, S.A. Kokoreva, G.N. Nikiforova,
V.I. Sambulov, V. M. Svistushkin

*Moscow Regional Scientific Research Clinical Institute after
M.F. Vladimirsky, 129110 Shepkina street 61/2
Moscow, Russia*

Increase of inflammatory middle ear diseases treatment efficiency is actual because it enables to eliminate inflammation and create favorable conditions for successful tympanoplasty result. In our clinic we used exogenous nitric oxide (NO) in multimodality treatment of patients with acute and chronic otitis media and after surgical procedures (sanitizing operations, tympanoplasty). NO was obtained from the atmospheric air by mean of "PLASON" unit. NO-therapy is based on the capability of endogenous nitric oxide to be a universal regulator of various biological processes in organism. A group of 67 patients in the age of 20-40 years underwent a course of NO-therapy.

In the case of acute catarrhal otitis media (15 patients) the healing course continued for 3-5 days. After the 1st procedure patients noted the significant reduce of pain and disappearance of stuffiness in the ear. After the course of NO-therapy there no hyperemia of tympanic membrane was observed. The clinical recovery was marked on the 3-5 day of NO-therapy.

The NO-therapy course for the patients with suppurative acute otitis media included 5-7 procedures. After the 3^d procedure the ear pain reduced and suppuration disappeared. By otoscopy after the course of NO-therapy no suppuration and hyperemia of tympanic membrane was marked, the perforation of tympanic membrane closed in every case.

In the third group, which consisted of patients with chronic suppurative otitis media, 7-9 procedures of NO-therapy were needed to achieve a positive result. Reduction of suppuration was noted after the 3-4 procedure. After the course of NO-therapy the stable decrease of inflammation was achieved.

NO-therapy was carried out after the sanitizing operations. It was started after the removal of the tamponade of the postoperative cavity. The healing course consisted of 7-10 procedures. After the course of NO-therapy the postoperative cavity was completely covered with epidermis.

NO-therapy was also used after myringoplasty (5-7 procedures after the removal of tamponade and plastic foil). The more rapid engraftment was marked. No cases of reperforation were observed.

Carried out investigations showed that NO-therapy as an add-on to standard treatment enables to increase the effectiveness of treatment in case of inflammatory middle ear diseases.