

The use of this method an objective assessment of nasal breathing on the basis of hardware-software complex «Optimus» improves the accuracy and diagnostic value of the active anterior and posterior rhinomanometry.

The method has been clinically tested in the Research Center of ear nose and throat of Kharkov. A survey of 132 patients with pathology that causes dysfunction of the nasal breathing in 17 % of cases managed to avoid surgery, whereas in other methods of diagnosis such interventions have been shown. For example, this applies to some patients with congenital deviations of the nasal septum in which the adaptive mechanisms lead to the development of anatomical features that negate the effect of the deviation on the physiology of nasal breathing.

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GLYCOSILATED MURAMYLPEPTIDES: SYNTHESIS AND BIOLOGICAL PROPERTIES

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In order to change the hydrophilic and lipophilic properties of N-acetylmuramyl-L-alanyl-D-isoglutamine (MDP) O-glycosylation was proposed.

This modification make synthesis more economics than other synthetic rotes. More than 50 glycosides of muramyl peptide were synthesized: linear β -alkyl glycosides, high lipophilic glycosides, β -dialkylmethyl glycosides, O- and S- β -aryl glycosides, β -aryl- and adamantly-1-alkylglycosides, β -cycloalkyl- and alkylcycloalkylglycosides and α -glycosides.

For amfiphilic glycosides with C₄-C₈ linear and cyclic aglycones high immunostimulating properties *in vitro* and *in vivo* were established. Comparison of immunostimulating properties of anomeric MDP glycosides *in vitro* and *in vivowas* shown that β -glycosides are more active than α -anomerer.

Some lipophilic MDP glycosides, such as, β -hexadecyl-, β -(2,3-didodecyloxypropyl)- and β -cholesteryl- in some experiments were more active immune stimulants than MDP. A great number of lipophilic β -alkyl- and β -alkylphenylglycosides demonstratedahigher antibacterial protective properties with comparison of MDP.