The role of nasal decongestant DROPs in releaving eustachian tube dysfunction of acute otitis media evaluted by non invasive test

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Otitis media is generally considered to occur frequently inchildren especially when epidemics of U.R.T.I. hits nation. Thisprospective study was carried out in 149 subjects, 129 of themwere patients with acute otitis media (A.O.M,) and 20 healthypersons as a control group. The purpose of the study was tocompare the results of the management of acute otitis media bydifferent means including and not including topical nasaldecongestant to evaluate its role in the treatment of acute otitismedia. Among the factors relevant to healing, the past andpresent histories of the patients were given special consideration.In the study group: (129 pt. 158e)The patients were assigned to five therapy groups:1) 20 patients (20 ears) to group (I) in which nasal decongestantwas applied nasally.2) 30 patients (34 ears) to group (II) in which antibiotic wastaken every 8 hours for 7 days.3) 30 patients (38 ears) to group (III) in which antibiotic andnasal decongestant DROPs were used.4) 30 patients (40 ears) to group (N) in which management wasby myringotomy, antibiotic and nasal decongestant DROPsinstillation.5) 19 patients (24 ears) to group (V)in which management wasby myringotomy and antibiotic administration. So subgroupsI, II & III are considered as conservatively treated groupwhile subgroups IV & Yare considered as actively treatedgroup.At the initial examination, (o-examination) the histories ofall patients were recorded and we performed the clinicalexamination and handed out the medicine. At the follow-upexaminations which took place 7 days and 21 days after the 0-examination, the condition of the Tympanic membrane wasexamined with a pneumatic otoscope. tympanometry wasemployed and atympanogram was plotted to all patient groups(sub-groups).In the control group 20 healthy subjects were recruited from thelocal population after thorough E.N.T. examination, and 2 (two)tympanograms were plotted to each subject before and after nasalDROPs instillation.It seems obviousfrom the results of this study that:1. In a total number of 40 ears (20 persons) there was adifferencein the middle ear pressure (10-20) mmH20 in 25% ofthem and the use of the nasal decongestant DROPs neither hadan effecton the middle ear pressure of all the subjects nor hadsucceded in reducing (eliminating) the difference in M.E.P.in the same subject so even after the application of the nasaldecongestant DROPs still 25% of the persons had also adifference(10-20) mmH20 betweenthe right and the left ear.2. The results of the comprehensivemanagement of the patientsin this thesis have demonstrated that, failure to perform thetest had occurred in 2% (Dt),

perforated tympanic membranein 3% (Jt), cure in 67% (Mt), middle ear effusion in 14.5%(Wt),eustachian tube dysfunctionin 13%CUt),the healed andimproved percentage is 80% (MUt).3. The management of patients must be based on the clearestpossible understanding of the system constituted by the nasalcavity, nasopharynx, eustachian tube and the middle ear.Within this system the eustachian tube probably has at leastthree physiologic functions with respect to the middle ear:ventilation, protection (from unwanted nasopharyngealsecretions and drainge of normal or abnormal secretionproduced within the middle ear itself so A) Attempt to reopen an obstructed E.T. in acute otitis media bythe frequent nasal instillation had failed completely and theuse of antibiotic was inevitable impressive that the treatmentof AO.M. should be directed toward eradication of infectionrather than trials to reareate the middle ear throughdecongestion of the eustachian tube, especially after noticingthat the N.D.D. had no effect in group III as [Lm(60.5 %) isinferior than Ln (69%) i.e Ln sLml. Also in group IV & V theresults were more or less the same [(LwC86.5%)> Lv (83%) andVIV (5%)