



SUMMARY OF OTOVENT PAPER

Stangerup, S E; Tjernstrom, O; Klokker, M; et al. Point Prevalence of Barotitis and Its Prevention and Treatment with Nasal Balloon Inflation: A Prospective, Controlled Study. *Otology and Neurotology* (2004). Vol. 25 pp 89-94

The study was conducted to estimate the incidence of barotitis after flight, to evaluate whether the incidence of barotitis can be reduced by nasal balloon inflation during descent and finally to estimate the effect of nasal balloon inflation in case of negative middle ear pressure after landing.

Aircraft passengers were examined by otoscopy and tympanometry before and after flying and filled in a questionnaire inquiring about ear problems. On half of the flights, the passengers were asked to inflate a nasal balloon during descent, whereas the other half were control flights.

A total of 188 passengers filled in the questionnaire. Of these, 134 were examined before and after the flight. Otoscopic signs of barotitis were found in 15% of the ears in the control group compared with 6% in the balloon inflation group. In ears with a negative pressure after flying, the pressure could be equalized by Valsalva's manoeuvre in 46%. Passengers who were unable to equalize the pressure in this way inflated a nasal balloon, and in 69%, this manoeuvre cleared the middle ear pressure.

The incidence of barotitis in this study of aircraft passengers was 14%. This figure could be reduced to 6% in passengers who performed nasal balloon inflation during descent. Nasal balloon inflation is recommended for passengers who have difficulty clearing their ears during and after flying.

Any questions or points of clarification can be directed to the undersigned.

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