

# Wpływ wieku na poziom emisji otoakustycznych u osób z prawidłowym słuchem

The influence of aging on otoacoustic emissions in normally hearing subjects

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## Summary

**Introduction.** The objective of this study was to measure age-related changes of otoacoustic emissions level in subjects with normal hearing in tonal audiometry. **Material and methods.** Click evoked otoacoustic emissions (CEOAEs) and distortion-product otoacoustic emissions (DPOAEs) were recorded in 146 ( $n = 292$  ears) subjects. Otoacoustic emissions were recorded in response to nonlinear clicks and two different primary tones ( $L1 = 65$ ,  $L2 = 55$  dB SPL;  $f2/f1 = 1.22$ ) from 1 to 5 kHz. Subjects were divided into three age groups: young ( $19.8 \pm 4.6$  years), middle-age ( $31.2 \pm 4.3$  years) and old ( $48.2 \pm 5.9$  years). All subjects had normal hearing and middle-ear function based upon standard audiometric criteria. **Results.** The principal findings were that CEOAEs and DPOAEs levels were smaller in the old group compared to the young and middle-aged groups, especially at the higher frequencies. **Conclusion.** The influence of age on the level of otoacoustic emissions was found.