

Cochlear function in CBA/CaJ mice following inhalation of brevetoxin-3

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Brevetoxin-3 was shown previously to adversely affect central auditory function in goldfish. The present study evaluated the effects of exposure to this agent on cochlear function in mice using the 2f(1)-f(2) distortion-product otoacoustic emission (DPOAE). Towards this end, inbred CBA/CaJ mice were exposed to a relatively high concentration of brevetoxin-3 (approximately=400 microg/m³) by nose-only inhalation for a 2-h period. Further, a subset of these mice received a second exposure a day later that lasted for an additional 4 h. Mice exposed only once for 2 h did not exhibit any notable cochlear effects. Similarly, mice exposed two times, for a cumulative dose of 6 h, exhibited essentially no change in DPOAE levels.

J Comp Physiol A Neuroethol Sens Neural Behav Physiol. 2005 Jul;191(7):619.-26