Current Issue
Browse Issues
Search
About this Journal
Instruction to Authors
Online Submission
Subscription
Contact Us
RSS Feed

Acta Medica Iranica
2009;47(4) : 3-10

TEMPORARY THRESHOLD SHIFT AND NOISE-INDUCED HEARING HANDICAP IN A GROUP OF TEXTILE WORKERS

F. Akbarkhanzadeh , D. Parvizpour

Abstract:

Exposing the ear to an intense noise will probably cause to hearing loss. This loss may be temporary threshold shift (TTS), permanent threshold shift (PTS), or a combination of the two. The average audiograms for the 157 textile workers, exposed to an average 100 dB (A) overall noise level, in 5 age groups indicated that the losses were most prominent for frequencies of 3 to 6 KC/S showing a peak at 4 KC/S. with continued exposure and aging significant permanent losses appeared at other neighboring frequencies as well as still further increases in the 3-6 KC/S range. The mean hearing loss of the three frequencies 0.5, 1 and 2 KC/S was chosen as an index of hearing impairment, and for this, beginning handicap was placed at 26 dB hearing level, where difficulty may encounter with low levels of everyday speech. Therefore, it was shown that the men older than 45 years were handicap even before starting their daily work. But at the end of working shift, the average of TTS combined with PTS was quantitatively about the same for the population studied independent of their ages. So, it was demonstrated that in the noise-exposed subjects TTS was inversely related to hearing level, and it was concluded that PTS might biologically protect the ear from further damage.

Keywords:

Textile workers

TUMS ID: 1605

Full Text HTML Full Text PDF 580 KB

top