

Young people with aging ears: a consequence of early presbycusis due to earphones misuse

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Madam, Extended use of earphones can cause noise induced hearing loss. Noise induced hearing loss may not be noticeable for years, but with time normal sounds may become distorted and it may be difficult for the person to understand speech. Akin to many overuse injuries, hearing loss is cumulative, but unlike overuse injuries hearing loss is permanent.¹ It depends on the sound intensity, exposure, types of earphone used, type of music listened and the person himself. The more the intensity of sound listened, less is the exposure time required to cause hearing loss.

Noise Induced hearing loss is the second most common cause of sensorineural hearing deficit, the victim gets less receptive to sound, causing him to increase the sound to a higher level and the vicious cycle continues. Such people present with transient hair cell dysfunction due to 'temporary threshold shifts'; however repeated episodes of such shifts can cause permanent threshold shift due to progressive loss of hair cells in the cochlea.²

Estimates put the number of people at risk in Europe at between 2.5 and 10 million while in Australia, a quarter of iPod users between 18 and 54 years of age listened at volumes sufficient to cause hearing damage.³ The mp3

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and iPod players can produce sounds of more than 115 decibels, a volume that can damage the hearing of a person exposed to the sound for more than 28 seconds per day. In the UK, the Royal National Institute for the Deaf carried out a survey and showed that at least two out of three people who use mp3 players, had their volume turned up to dangerous levels of over 85 decibels.⁴

This consequential presbycusis is totally preventable. It is important to avoid listening fatigue by resting the ears in silence after long sessions with headphones and to resist the temptation to turn up the volume. Sixty percent of the potential volume of the mp3 and iPod players for one hour a day is said to be relatively safe.⁵ In individuals, who use earphones for more than this period, a periodic hearing test by an audiologist or ear physician is the best way to monitor personal hearing health.

References

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