

Acetaminophen associated with risk of hearing loss: A safety alert

NEW(S)

There has been recent news of association between acetaminophen and risk of hearing loss. Does it raise the bar of safety against indiscriminate use of the drug? National Institute of Health (NIH), USA, funded two prospective studies, in which the participants were educated health professionals and nurses, who used acetaminophen, ibuprofen and aspirin frequently and reported hearing loss if any through detailed questionnaires.^[1,2] These studies put the hitherto considered safe drug acetaminophen in the spotlight for its clear association with incidence of hearing loss in the study participants. It was seen that the risk increased with increase in intake or increase in frequency of use of the aforementioned drugs. This finding has an interesting prospect in our country, where acetaminophen is the most commonly used over-the-counter analgesic and antipyretic. The question is how safe acetaminophen is?

(RE)VIEWS

The mechanism behind the hearing loss with the use of acetaminophen is due to the depletion of endogenous cochlear glutathione. The cochlear glutathione normally is present in significant amounts and protects cochlea from the noise induced damage. Hence, its depletion will result in sensorineural hearing loss. In the prospective studies, conducted by NIH, in both men and women, over a period of around 20 years, it was seen that the risk increased with longer duration of regular use of acetaminophen and also with the increased frequency of its use. The hearing loss was self reported by the participants through a detailed questionnaire, which they were asked to fill and submit every two years. These studies showed that using ibuprofen or acetaminophen for two days or more per week is clearly associated with the risk of hearing loss, the extent of which increases

with increased use. This is an important finding given the indiscriminate use of these drugs, more so acetaminophen, especially in India, and the social implications of the hearing loss associated with its use.^[3,4] To conclude, acetaminophen has long been considered “safe” when it comes to treating common ailments like fever, body aches, mild pain and has been frequently consumed by people irrespective of age and sex. However, it is high time to take this drug seriously and more studies need to be done in our clinical scenario, to recommend the judicious use of this drug.

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