Indian Journal of Otolaryngology and Head and Neck Surgery

COUNTRY
India

SUBJECT AREA AND CATEGORY
Medicine
Otorhinolaryngology
Surgery

PUBLISHER
Springer India

H-INDEX
19

PUBLICATION TYPE
Journals

ISSN
22313796, 09737707

COVERAGE
1993-2020

INFORMATION
Homepage
How to publish in this journal

SCOPE
Indian Journal of Otolaryngology and Head & Neck Surgery was founded as Indian Journal of Otolaryngology in 1949 as a scientific Journal published by the Association of Otolaryngologists of India and was later rechristened as JOHNS to incorporate the changes and progress. JOHNS, undoubtedly one of the oldest Journals in India, is the official publication of the Association of Otolaryngologists of India and is about to publish it is 67th Volume in 2015. The Journal published quarterly accepts articles in general Oto-Rhino-Laryngology and various subspecialties such as Otology, Rhinology, Laryngology and Phonosurgery, Neurotology, Head and Neck Surgery etc. The Journal acts as a window to showcase and project the clinical and research work done by Otolaryngologists community in India and around the world. It is a continued source of useful clinical information with peer review by eminent Otolaryngologists of repute in their respective fields. The Journal accepts articles pertaining to clinical reports, Clinical studies, Research articles in basic and applied Otolaryngology, short Communications, Clinical records reporting unusual presentations or lesions and new surgical techniques. The journal acts as a catalyst and mirrors the Indian Otolaryngologists active interests and pursuits. The Journal also invites articles from senior and experienced authors on interesting topics in Otolaryngology and allied sciences from all over the world. The print version is distributed free to about 4000 members of Association of Otolaryngologists of India and the e-Journal shortly going to make its appearance on the Springer Board can be accessed by all the members. Association of Otolaryngologists of India and M/s Springer India group have come together to co-publish JOHNS from January 2007 and this bondage is going to provide an impetus to the Journal in terms of international presence and global exposure.

Join the conversation about this journal

https://www.scimagojr.com/journalsearch.php?q=13732&ip=aid&clean=0
Dr Naveed 9 months ago

Sir/Madam is this journal indexed according to MCI norms?

reply

Melanie Ortiz 8 months ago

Dear Dr Naveed,

Thank you for contacting us.

SJR is a portal with scientometric indicators of journals indexed in Elsevier/Scopus. Unfortunately, we cannot help you with your request referring to the index status. We suggest you consult Scopus database (see the current status of the journal) or the mentioned database for further information. You can also check that information in the journal's website or contact directly with the editorial staff.

Best Regards, SCImago Team

Leave a comment

Name

https://www.scimagojr.com/journalsearch.php?q=13732&tip=sid&clean=0
The Association of Reactive Oxygen Species Levels on Noise Induced Hearing Loss of High Risk Workers in Dr. Soetomo General Hospital Surabaya, Indonesia

Purnami Nyilo1 · Manyakori Serafika Permoni Putri2

Received: 9 April 2018 / Accepted: 23 July 2018
© Association of Otolaryngologists of India 2018

Abstract Excessive noise exposure could increase the production of reactive oxygen species in the cochlea, thus causing the risk of noise-induced hearing loss (NIHL). Noise is commonly found in the industrial sites. However, public places like hospital also can have noisy location which risk the workers of NIHL. To analyzed the correlation of reactive oxygen species and hearing impairment to employees at risk in the hospital. Participants were obtained by identifying the employees in hospital from 3813. They were examined for baseline characteristics, hearing loss and reactive oxygen species. Hearing loss was defined as audiometry and tympanometry level. The statistical test that used in this study is Chi square test (p < 0.05). The proportion of participant was 42.43 ± 10.72 years old in women (58.33%) and noise levels at Dr. Soetomo General Hospital was 98.15 ± 8.16 dB in range 85.39–112.90 dB. The prevalence of NIHL was 47.92% (audiometry) and 70.83% (otocoustic emission). Reactive oxygen species estimated 5.55 ± 4.39 ng/ml. Statistical analysis of reactive oxygen species to audiometry (p = 0.993) and reactive oxygen species to otoacoustic emission (p = 0.647). Increased production of reactive oxygen species that cause hearing loss, but there was no correlation between reactive oxygen species and hearing loss in risk worker at the hospital.

Keywords Reactive oxygen species · Audiometry · Otoacoustic emission · Noise-induced hearing loss

Introduction

Noise possibly cause health problems in the form of noise-induced hearing loss (NIHL). In Nepal, it was reported that 31% of carpenters and 44% sawmill workers experience NIHL [1]. In the Tanzanian mining area reported that 12% workers have poor hearing and 35% have a mild hearing loss. Every year the NIHL population increases due to the hearing exposure [2].

Noisy exposure could increase the production of reactive oxygen species (ROS) in the cochlea. ROS is a mediator of cochlear cell damage, in addition biochemically ROS causes peroxidation of cochlear lipids and produces toxic substances. ROS itself was reported to persist cochlear for 7–10 days by post-exposure to the noise. If individuals are exposed to noise every day, they will have a higher risk to experience noise-induced hearing loss and other hearing loss [3].

Medical examination of hearing loss requires a tool for strengthening the diagnosis including using audiometry and otoacoustic emission (OAE) [4]. Audiometry is used to measure the subjective hearing impairment of the patient while OAE is used to evaluate the patient’s hearing loss objectively [4, 5]. Thus, both examinations are important as the basis for effective therapy.

Indonesia is a country that has a large area and has various tribes [6]. Characteristics of workers in Indonesia is very unique, often found its workers tend not to comply for in the use of Personal Protective Equipment. Government regulations related to occupational health especially noise
Table 1 Frequency of demographic participant

<table>
<thead>
<tr>
<th>Variables</th>
<th>Characteristics</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>41.67</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>58.33</td>
</tr>
<tr>
<td>Education</td>
<td>Elementary school</td>
<td>2.08</td>
</tr>
<tr>
<td></td>
<td>Junior high school</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Senior high school</td>
<td>81.25</td>
</tr>
<tr>
<td></td>
<td>Bachelor degree</td>
<td>16.67</td>
</tr>
<tr>
<td>Noise pollution areas</td>
<td>Sanitation</td>
<td>14.58</td>
</tr>
<tr>
<td></td>
<td>Maintenance medic</td>
<td>16.67</td>
</tr>
<tr>
<td></td>
<td>Nutrition</td>
<td>68.75</td>
</tr>
</tbody>
</table>

Table 2 Average of respondents characteristic

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean ± SD</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>42.43 ± 10.72</td>
<td>0.023</td>
</tr>
<tr>
<td>Noise</td>
<td>98.58 ± 4.54</td>
<td>0.167</td>
</tr>
<tr>
<td>Duration of work</td>
<td>19.54 ± 9.56</td>
<td>0.042</td>
</tr>
</tbody>
</table>

Table 3 ROS associated with hearing loss

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>ROS (%)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>OAE</td>
<td>Refer</td>
<td>54.17</td>
<td>16.67</td>
</tr>
<tr>
<td></td>
<td>Pass</td>
<td>14.28</td>
<td>14.58</td>
</tr>
<tr>
<td>Audiometry</td>
<td>Hearing loss</td>
<td>25.00</td>
<td>22.92</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>35.42</td>
<td>16.66</td>
</tr>
</tbody>
</table>

ROS and Hearing Loss

The participant was mostly in OAE category of Refer and ROS category of low (54.17%). There is no significance correlation between OAE characteristic and ROS. Most audiometry cattery was found normal with low percentage of ROS value (35.42%). The result of the statistical test with Chi square found no correlation between plasma ROS level and audiometry value (p = 0.993). The result of the statistical test with Chi square found no significant correlation between serum ROS level and audiometry (p = 0.647). The result of analyzed was shown in Table 3.

Discussion

NIHL is a hearing loss that experienced by many workers. Noisy exposure over 85 dB for 8 h is believed to interfere auditory organ function [9, 10]. Some recent studies suggest that NIHL hearing loss is due to an increase in the production of toxic ROCs of cochlea [3, 11]. In vivo studies also show that ROS causes mutation of the apoptotic-inducing factor (AIF) gene. AIF regulation reduction in neuronal cells makes it more sensitive and easily damaged [12].

ROS is considered to be a toxic cellular metabolic product but it also serves as a molecule that regulates many physiological processes. ROS plays an important role in the induction of apoptosis under physiological and pathological conditions. Increased ROS formation and subsequent apoptotic induction have been implicated in the development of some hearing loss pathologies. Furthermore, mitochondrial dysfunction plays an important role in some types of hearing loss [11].

Based on this research there was no correlation between ROS and hearing loss. It was proved by statistical analysis that no correlation between ROS level and audiometry and OAE was found. The audiometric examination is a subjective examination of the patient about the individual’s hearing threshold [13]. Meanwhile, OAE is an examination of the inner ear objectively, especially the function of outer cochlear cell [5]. Both examinations are often used as indicators for early detection of hearing loss [4, 14].

Currently, ROS was alleged to be one of the main causes of impaired hearing function. ROS has characteristics as an unpaired electron, activating toxic chemical reactions to cellular and subcellular structures [15]. ROS levels in the cochlea cause decreased hearing function by damaging the cochlear hair cells [16]. However, some research suggests the levels of ROS in cochlea increased when it exposed to the noise first time and decreased subsequently after exposure [3, 11]. The progression of ROS to a decrease in hearing function takes a long time. The condition was
Indian Journal of Otolaryngology and Head and Neck Surgery

Country: India - SIR Ranking of India

Subject Area and Category: Medicine, Otorhinolaryngology, Surgery

Publisher: Association of Otolaryngologists of India

Publication type: Journals

ISSN: 00195421

Coverage: 1993-ongoing

Scope: The Journal acts as a window to showcase and project the clinical and research work done by Otolaryngologists community in India and around the world. It is a continued source of useful clinical information with peer review by eminent Otolaryngologists of repute in their respective fields. The Journal accepts articles pertaining to clinical reports, Clinical studies, Research articles in basic and applied Otolaryngology, short Communications, Clinical records reporting unusual presentations or lesions and new surgical techniques. The journal acts as a catalyst and mirrors the Indian Otolaryngologist active interests and pursuits. The Journal also invites articles from senior and experienced authors on interesting topics in Otolaryngology and allied sciences from all over the world.

Homepage

Join the conversation about this journal

Quartiles

Otorhinolaryngology

Surgery

1999 2001 2003 2005 2007 2009 2011 2013 2015 2017

SJR

Citations per document
Members of the Editorial Board
Dr. Debashish Guha, Addl. Chief Medical Director, B R Singh Hospital, Eastern Railway, Kolkata, India
Dr. C. V. Srinivas, Professor, Dept of ENT, Dr B R Ambedkar Medical College, Bengaluru, India
Dr. Anil S Harugop, Professor & Head, Dept. Of ENT & HNS, J N Medical College, Kaher, K L E Hospital, Belgaum, India
Dr. Tapan Kanti Hazra, Professor & Head, Dept of ENT, N R S Medical College, Kolkata, India

Editorial Secretaries
Dr. J.P. Choudhary
Dr. A.K. Banthia

Treasurer
Dr. Yashveer Jayantha Kedilaya

Ex-Officio Members
President AOI
Dr. Satya Prakash Dubey

Hon. Secretary AOI
Dr. Kaushal Girish Seth

Hon. Treasurer AOI
Dr. Yogesh G. Dabholkar

National Advisors
Dr. Anil Bajpai
Dr. A. G. Pusalkar
Dr. A. K. Sinha
Dr. K. R. Meghanadh
Dr. Ravi Ramalingam
Dr. Satish Jain
Dr. Virendra Ghaisas
Dr. V. K. Poore

International Advisors
Prof. Dr. Andreas Schmelzer (Swiss)
Prof. Dr. Jacques Magnan (France)
Prof. Dr. Mazin Al Khaboori (Oman)
Prof. Dr. Rajesh Kakani (U.S.A)
Prof. Dr. Stefan Dazert (Germany)

Org. Secretary
72th AOICON 2020-Nagpur
Dr. Nandu Kolwadkar

Governing Body of the Association of Otolaryngologists of India
President
Dr. Satya Prakash Dubey
Divya Advance ENT Clinic, Bhopal, Madhya Pradesh, India

Immediate Past President
Dr. Ravi Ramaligam
KKR ENT Hospital & Research Institute, Chennai, India

President Elect
Dr. Samir K Bhargava, Bhargava Nursing Home, Mumbai, India
Hon. Secretary
Dr. Kaushal Girish Seth
Excel ENT Hospital, Mumbai, India

Hon. Treasurer AOI
Dr. Yogesh G. Dabholkar

Hon. Chairman Editorial Board IJO&HNS
Dr. Saumendra Nath Bandypadhyay, Kolkata, India

Hon. Editor IJO&HNS
Dr. Laxmi Narayan Namdev

Governing Body Members
Dr. Debasish Guha
Dr. Gajanan Mohaniraj Kashid
Dr. C. John Panicker
Dr. Devendra M Mahore
Dr. Bidhan Ray
Dr. Vishwas K V
Dr. K. S Gangadhara Somayaji
Dr. Amit Ganguli
Dr. Rajendra Bansal

For authors
Submission guidelines Ethics & disclosures Contact the journal Submit manuscript

Advertisement

Springer
Publish with us
Authors & Editors
Journal authors
Publishing ethics
Open Access & Springer

Discover content
SpringerLink
Books A-Z

https://www.springer.com/journal/12070/editors
Nomor ISSN yang telah diterbitkan:

Nama terbitan: Jurnal Kesehatan Dokter Soetomo


Pengelola: Bidang Penelitian dan Pengembangan RSUD Dokter Soetomo Surabaya

Kontak: Dr. IGM Roza Gunadi Ranuh, dr.,Sp.A(K)
Bidang Litbang RSUD Dr. Soetomo Surabaya
Jl. Mayjen Prof. Dr. Moestopo 8-8 Surabaya
Tel/fax: 031-5501071 / 031-5501164

Penerbit: Bidang Penelitian dan Pengembangan RSUD Dokter Soetomo Surabaya

Frekwensi terbitan: 3 bulanan

Nomor ISSN: 2407-2486 (media cetak)

Keterangan: SK no. 0005.12/IV.3.2/ISSN/2014.11 (mulai edisi Vol. 1, No. 4, November 2014)