Influence of diabetes on hearing loss in elderly subjects with otological disorders

Manche Santoshi Kumari¹,², Jangala Madhavi¹,², Koralla Raja Menganadh¹ and Akka Jyothy²

¹MAA Research Foundation, India
²Osmania University, India

Diabetes mellitus characterized by alterations in levels of glucose affects multiple organ system including auditory system. Hearing loss is one of the most common otological disorders in adults with diabetes. This study aims to identify the distribution pattern of hearing loss in adults suffering from diabetes affected with otological diseases. A total of 348 cases above 40 years of age with confirmed otological disorders presenting hearing loss visiting MAA ENT Hospitals, Hyderabad, India were considered for the study. Hearing loss was evaluated using pure tone audiometry and average for the frequencies at 0.5, 1 and 2 KHz was recorded. Among the diabetic cases, 65.5% were males and 34.5% were females. 66.1% of the diabetic subjects suffering from hearing loss showed pathological changes in the middle ear followed by inner ear (31.6%) and outer ear (2.3%). It was also observed that 37.9% of the total diabetic subjects were in the age group of above 60 years followed by 40-50 years (35.1%) and 50-60 years (37.9%). With regard to pattern of hearing loss among diabetic subjects, 44.3% showed conductive form, 38.5% showed sensorineural and 17.2% showed mixed hearing loss. 33.2% and 13.8% of the diabetic subjects showed tinnitus and vertigo respectively. The present study revealed the significant contribution of co-morbid condition of diabetes mellitus to hearing loss in otological disorders.

Biography

Manche Santoshi Kumari completed her PhD work from Osmania University and has submitted her thesis. She is a Research Scholar of Institute of Genetics and Hospital for Genetic Diseases. She has participated in oral and poster presentations in national and international conferences and has international papers to her credit.

santoshimanche@gmail.com