

A Descriptive Study of the Hearing of HIV Positive Individuals

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Introduction

Acquired Immunodeficiency Syndrome (HIV/AIDS) is caused by the human immunodeficiency virus (HIV/AIDS) and results in reduced immunity, which makes the persons more susceptible to numerous occasional infections and diseases due to low immunity, which requires attention regarding the use of ototoxic drugs, as in the case of tuberculosis. Ministry of Health's data shows 592.914 AIDS cases registered in the country from 1980 until June 2010. Only in the year 2009, there were 38.538 reported cases across the country, accounting to an incidence rate of about 20 cases of AIDS per 100,000 inhabitants.

Objectives

This study aims to characterize the auditory profile of HIV positive individuals and to investigate diseases caused by lower immunity and its interference with the hearing profile.

Methods

The study included 58 patients of both genders, being 24 female and 34 male, all HIV carriers with confirmed diagnosis and in treatment at the Research Institute Evandro Chagas (IPEC/Fiocruz), where they were referred to hearing clinical investigation at the Reference Center for Occupational Health and Human Ecology (CESTEH/Fiocruz). The age range of the group varied between 25 and 66 years with a mean

age of 43 years (SD 8.7559). Prior to the audiometry, all participants underwent the CESTEH audiology service anamnesis. Following that an audiometry examination by air and bone conduction was conducted using an clinical audiometer Beltone, Model 2000 in a audiometric cabin. The results were interpreted using Davis and Silvermann's classification criteria of degree of hearing loss.

Results

Out of 58 patients evaluated, 42 presented hearing loss, being 21 of the sensorineural type ranging from mild to severe and 21 of the conductive or mixed kind ranging from mild to severe. All patients were taking antiretroviral medication. Of the total sample studied, 22 patients had tuberculosis (TB) and were on medication for this disease and 36 patients did not present tuberculosis. Of the 22 with HIV and TB, 19 had hearing loss, i.e. 86.4% while the group with HIV only showed 63.9% of hearing loss. These results show a statistically significant difference in hearing loss between the population with HIV and TB when compared with the group with HIV only.

Conclusion

Patients with HIV and tuberculosis presented auditory change. AIDS/HIV and related diseases should be monitored and prevented so that patients do not suffer further damage due to the use of ototoxic drugs, which are considered a risk factor for hearing loss.

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