

**HEARING LOSS IN PATIENTS RECEIVING CISPLATIN AT
UGANDA CANCER INSTITUTE.**

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MBChB (MUST)

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE**

OF

MASTER OF MEDICINE, (OTORHINOLARYNGOLOGY,

HEAD AND NECK SURGERY)

OF

MAKERERE UNIVERSITY

ABSTRACT.

Introduction.

Cisplatin (cis-diamminedichloridoplatinum) is an antineoplastic agent with ototoxic effects (1-7). Cisplatin-induced ototoxicity is manifested as high – frequency sensorineural hearing loss (SNHL). Audiologic monitoring is crucial for early identification of cochlear damage and resulting hearing impairment. Early identification provides the options of changing the chemotherapeutic protocol to prevent further damage, and early rehabilitation(8).

General Objective:

The main objective of this study was to determine the prevalence of Cisplatin-associated hearing loss among patients attending Uganda Cancer Institute.

Methodology

Study design: This was a cross sectional study of patients on Cisplatin chemotherapy attending the Uganda Cancer Institute - Mulago from August 2011 to February 2012. Consecutive sampling procedure was used. After outer/middle ear causes of hearing loss had been ruled out, audiometry was done by the principle investigator and/or a qualified assistant. This was done using a biologically calibrated clinical audiometer by the Hughson-Westlake method, to determine hearing thresholds of patients in the study population. The data was then cleaned, coded and entered in the computer in the view section of SPSS version 17.0 after which it was analyzed using STATA version 10.

Results

A total of 39 patients were recruited. The median age of the patients was 47years with a mean of 44years, while the range was 11-72years. The ratio of male to female was 1:2.9. The prevalence of hearing loss in the patients was found to be 17 /39 (44%). The majority 12/39 (31 %) had grade 1 sensorineural hearing loss according to Brock's classification while 3/39 (8 % of) had grade 2 the rest having 1 patient in grade 3 and 4 respectively.

Conclusions

The prevalence Cisplatin induced hearing loss in the patients receiving Cisplatin at UCI is 44% according to Brock's. The frequency of disabling hearing loss is 13%; that is those with hearing impairment of more than mild degree hearing impairment.