

CISPLATIN INDUCED HEARING LOSS IN PAEDIATRIC MALIGNANCIES

DEPARTMENT: ENT

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OBJECTIVES:

To find the incidence of cisplatin induced sensorineural hearing loss, the correlation between cumulative dose of chemotherapy and hearing loss, and the influence of age and time on the same.

METHODS:

Observational study. Children above 5 years with malignancies other than head and neck malignancies and planned for or undergoing chemotherapy with cisplatin from January 2012 were informed about the study, consented and recruited. They were then followed up for a period of 12 weeks. Before the administration of cisplatin, these patients are seen in the ENT department, a targeted history and examination is done and hearing assessment is performed which includes an Audiogram, Tympanometry and OAE. Cisplatin was administered according to protocol and were called back after 6 weeks and 12 weeks for a repeat evaluation and hearing assessment.

RESULTS:

By 6 weeks, 17 developed grade 1 hearing loss and 1 developed grade 2 hearing loss. At the end of 3 months, 63% patients developed grade 1 hearing loss, 20% grade 2 and 5% grade .40% of those above 15 years had normal hearing as against only 9% in age group 5-10 years. 10-15 year age group showed a 9.5% incidence of hearing loss. 49% of patients who were exposed to higher doses (34 mg/m²) developed sensorineural hearing loss as against 11% in other groups.