



Contents lists available at [ScienceDirect](http://www.elsevier.com/locate/ijporl)

journal homepage: www.elsevier.com/locate/ijporl



Department of Medical Genetics, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China
 Department of Pediatrics/Medical Genetics, Faculty of Medicine and Health Sciences, University of Sherbrooke, Sherbrooke, Québec, Canada
 Rehabilitation Research Center for Deaf Children, Wuhan, China
 Department of Otolaryngology, The Central Hospital of Enshi Tujia and Miao Autonomous Prefecture, Hubei Province, China
 Department of Otolaryngology, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, 1095 Jiefang Road, 430030 Wuhan, Hubei Province, China

Article history:

Received 15 June 2017
 Received in revised form 15 June 2017
 Accepted 15 June 2017

Keywords:

CC
 C
 C

Objective:

To determine the prevalence of hearing impairment in children with Down syndrome.

Methods:

A retrospective study was conducted in a tertiary care center. All children with Down syndrome who had undergone hearing screening were included. The prevalence of hearing impairment was determined by comparing the results of the hearing screening with the results of the audiogram.

Results:

The prevalence of hearing impairment in children with Down syndrome was 10.5%.

Conclusions:

Hearing impairment is present in 10.5% of children with Down syndrome.

1. Introduction

Down syndrome (DS) is a chromosomal abnormality characterized by the presence of a third copy of chromosome 21. It is the most common chromosomal abnormality in live births, occurring in approximately 1 in 700 live births. Children with DS are at an increased risk of hearing impairment, which can significantly affect their communication and learning. The prevalence of hearing impairment in children with DS has been reported to range from 10% to 20%. The purpose of this study was to determine the prevalence of hearing impairment in children with DS in a tertiary care center.

The study was conducted in a tertiary care center. All children with DS who had undergone hearing screening were included. The prevalence of hearing impairment was determined by comparing the results of the hearing screening with the results of the audiogram. The results of the hearing screening were compared with the results of the audiogram to determine the prevalence of hearing impairment. The prevalence of hearing impairment in children with DS was 10.5%.

The results of the hearing screening were compared with the results of the audiogram to determine the prevalence of hearing impairment. The prevalence of hearing impairment in children with DS was 10.5%.

E-mail address: xxxxx@xxxxx.com

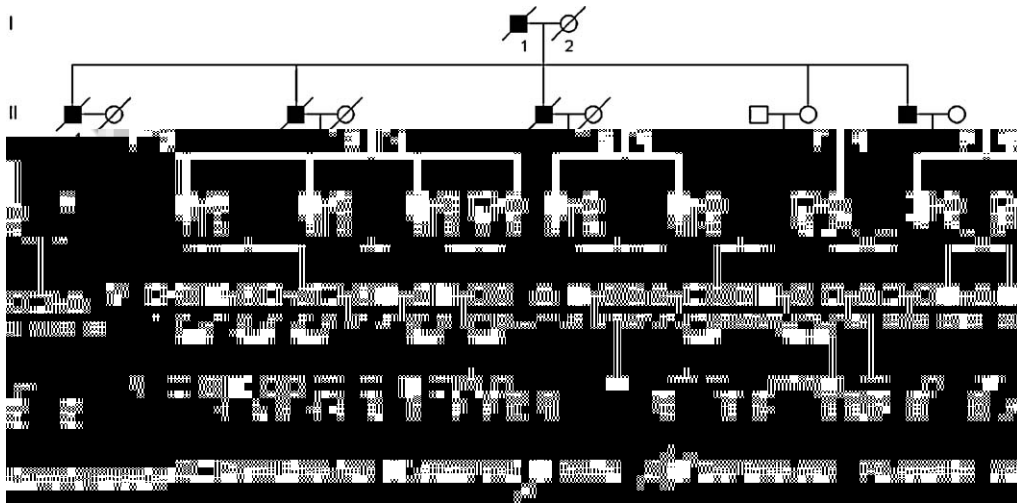


Fig. 1.

2. Subjects and methods

2.1. Ethical considerations

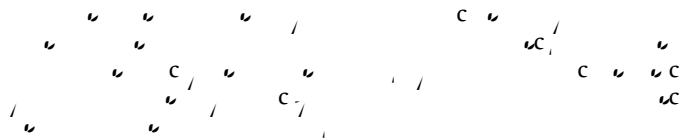
2.2. Participants

2.3. Audiometric evaluations

3. Results

3.1. The distribution of the disease in the family

3.4. Audiometric results for patrilineal females and their male offspring



4. Discussion

