INTRODUCTION

Incomplete partition type II (IP II; Mondini dysplasia) is most common cochleovestibular anomaly. Incomplete partition type II (incompletely partitioned cochlea, the Mondini deformity), there is a cochlea comprised of a normal basal turn and cystic apex accompanied by a minimally dilated vestibule and enlarged vestibular aqueduct (EVA).

METHODS AND MATERIALS

We reviewed records of 527 patients with profound SNHL undergoing CI at the Asan Medical Center, South Korea. Forty-four of 44 patients with IP II were operated on CI between January 2001 to April 2009. We reviewed medical records including preoperative computed tomography (CT), Magnetic Resonance Image (MRI), intraoperative findings, postoperative data and speech perception evaluation. The operations were carried out by one surgeon using microsurgery and facial recess approach techniques. We tested patients pure tone audiometry (PTA) preoperatively. We classified patients as age group after cochlear implantation.

RESULTS

44 patients with IP II presented in this study were 29 males and 15 females. The average age of the patients at time of implantation was 10.4 years. Prelingually deaf patients were 40 and postlingually deaf patients were 4. We followed up 8 years after CI operation. We could classify the results of that 27 profound SNHL patients with normal inner ear structure in this study. Additionally, we analyzed speech perception of IP II patients as age group after cochlear implantation.

CONCLUSIONS

There was good outcomes in speech perception test through patients had IP II. Especially results of postoperative speech perception tests was better in group II and group IV. There was no difference in results of speech perception test between IP II and normal inner ear anatomy group at the time of test. We recommend CI to IP II patients on the basis of our results.