

DESCRIPTION OF THE CHARACTERISTICS OF PATIENTS WITH PRESBYCUSIS AT TANGERANG CITY HOSPITAL FOR THE PERIOD 2014- OCTOBER 2023

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KEYWORDS

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ABSTRACT

Presbycusis has a prevalence of 30-45% in the elderly older than 65 years, especially in men. In Indonesia, 30-35% of elderly aged 65-75 years experience presbycusis. This study aims to determine the prevalence of presbycusis cases in the ENT-BKL Poli of Tangerang City Hospital for the period 2014-October 2023. This study is a descriptive crosssectional study conducted from November to December 2023 at Tangerang City Hospital, with the inclusion criteria of age ≥ 65 years of down sloping audiometry results. The results of this study data obtained 48 cases of presbycusis found 35 male patients (72.92%), 13 female patients (27.08%). Based on the guarantee, 43 patients (89.58%) were BPJS users, 5 (10.42%) patients were public financing. Of the total 48 presbycusis cases, 10 (20.83%) patients received hearing aid therapy and 38 (79.17%) other patients did not receive hearing aids.

INTRODUCTION

Presbyakusis is a natural process of age-related decline in hearing function, as a result of sensorineural hearing loss caused by cochlear hair cell death. the age of the disorder varies but hearing difficulties usually begin in the mid-60s. genetic risk factors can make symptoms occur earlier than usual. the most common characteristic symptom is bilateral hearing loss (melinda, muyassaroh, & zulfikar, 2012).

Globally, the prevalence of presbycusis varies, estimated to occur in 30-45% of people over 65 years of age, the National Institute on Aging provides information that one-third of the American population between the ages of 65 - 74 years and half of the population aged 85 years and over suffer from presbycusis (Melinda et al., 2012), (Pasingi, n.d.). In Indonesia, 30-35% of the elderly aged 65-75 years experience presbycusis (Safitri, Fauziningtyas, Indarwati, Efendi, & McKenna, 2022). Based on audiometric examination, the majority of men and women have moderate hearing loss, 48% and 26.98% (Ario, 2022).

The aim of the study was to determine the profile of patients with presbycusis based on age, gender, patient demographics, and patient management in the ENT Clinic of Tangerang City Hospital in the period 2014-October 2023.

RESEARCH METHODS

This study was a descriptive crosectional study conducted at Tangerang City General Hospital. All medical record data of patients aged ≥ 65 years who have been auditioned and diagnosed with presbycusis in the ENT- KL clinic of Tangerang City Regional General Hospital for the period 2014-October 2023, with the exclusion criteria of all patients who were not diagnosed with presbycusis and incomplete medical record data.

RESULTS AND DISCUSSION

Results

Table 1 Number of cases and prevalence of presbycusis aged ≥ 65 years at Tangerang City Hospital from 2014 to October 2023.

Table 1
Number of cases and prevalence of presbycusis

Year	Presbycusis	Percentage
2014	3	6.25%
2015	8	16.67%
2016	7	14.58%
2017	8	16.67%
2018	3	6.25%
2019	6	12.50%
2020	0	0.00%
2021	3	6.25%
2022	7	14.58%
2023 (Jan-Okt)	3	6.25%
Total	48	100.00%

The table above shows that the prevalence of patients with presbycusis at Tangerang City Hospital in the period 2014-October 2023 was 48 patients. The most presbycusis cases were found in 2015 and 2017, namely 8 (16.67%) patients and the lowest in 2020 as many as 0 patients (0%) (Putri, Sangging, & Himayani, 2023).

Table 2 Number and Percentage of Presbycusis by Age according to WHO 2013 at Tangerang City Hospital for the period 2014-October 2023 (Benly et al., 2022).

Table 2
Number and percentage of presbycusis by age

Year	Frequency	percentage
55-65 th (elderly)	6	12,50%
65-74 th (young-old)	28	58.33%
75-90 th(old)	14	29.17%
>90 th (very old)	0	0.00%
Total	48	100.00%

Based on the table above, the prevalence of patients with Presbycusis according to age classification based on WHO 2013 at Tangerang City Hospital for the period 2014 - October 2023 was highest in the age group 66-74 years as many as 8 (58.33%) patients and the lowest age group at the age of 55-65 years as many as 6 (12.50%) patients. There were no presbycusis cases found at the age of > 90 years.

Table 3 Number and Percentage of Presbycusis Cases by Gender at Tangerang City Hospital during 2014-October 2023.

Table 3
Number and percentage of presbycusis by gender

Gender	Frequency	percentage
Male	35	72.92%
Women	13	27.08%
Total	48	100.00%

Based on the table above shows data that patients with presbycusis according to gender are 35 (72.92%) male patients and 13 (27.08%) female patients (Johnson & Bailey's, 2014).

Table 4 Number and Percentage of Patients with Presbycusis based on Management at Tangerang City Hospital from 2018 to October 2023.

Table 4
Total percentage of patients based on RSUD management

Management	Frekuensi	Presentase
Hearing Aids	10	20.83%
Non-Hearing Aid	38	79.17%
Total	48	100.00%

Based on the table above shows data as many as 10 (20.83%) patients who treated with presbycusis at the Tangerang City Hospital Hospital for the period 2018 - October 2023, received hearing aid therapy and as many as 38 (79.17%) and patients who did not get hearing aids as much.

Discussion

Presbycusis is a high-frequency sensorineural deafness, generally occurring from the age of 65, symmetrical in the left and right ears. Presbycusis can start at a frequency of 1000 Hz or more (Mangunkusumo E, Wardani RS, 2020).

In this study, the prevalence of patients with presbycusis was 48 patients. The highest number of presbycusis cases was found in 2015 and 2017, namely 8 (16.67%) patients and the lowest in 2020 as many as 0 patients (0%). This happened because in 2020 there was a PSBB (large-scale social restriction) which caused fewer visits to the hospital by patients aged ≥ 65 years (Iskar, Akbar, Dozan, & Yudiansyah, 2021).

The results of this study for the prevalence of presbycusis based on age obtained age 66-74 years as many as 8 (58.33%) patients and the lowest age group at the age of 55-65 years as many as 6 (12.50%) patients. There were no cases of presbycusis at the age of > 90 years. This is in accordance with the research of Ari MM et all which states that most presbycusis patients

are aged ≥ 65 years (41.48%) (Ario, 2022), this is reinforced by the research of Melinda et al which states that most presbycusis patients are aged < 75 years (32.2%).⁴ This is in accordance with the theory that with increasing age, the possibility of degeneration is higher, including in the hearing organ so that its function will decrease (Pasingi, n.d.).

The results of the percentage of cases of patients with presbycusis according to gender were 35 (72.92%) male patients and 13 (27.08%) female patients. This is in accordance with the research of Wibowo et al which states that the incidence of presbycusis is more in men, namely (66.67%) this is due to hormonal changes and the progressivity of cochlear degeneration, and also because men experience more noise due to work (Wibowo & Soedarmi, 2010).

In the results of the study 20.83% (10) patients with presbycusis received hearing aid therapy and 79.17% (38) of other patients did not receive hearing aids. These results are due to the fact that in this study the city hospital of Tangerang has only collaborated for hearing aids since 2018 so from 2014-2017 medical record data on the provision of hearing aids has not been recorded. In patients who choose not to take hearing aids because they do not help so that patients refuse this is in accordance with the 2013 dilla study that as many as 49.8% did not help hearing, as well as other things that cause patients not to take hearing aids are due to general patients and the price of hearing aids is expensive this is in accordance with 2013 dilla research states 75.52% do not want to buy hearing aids (Rahmi, 2015). And as for the hearing aids received by bpjs patients in recent years have a maximum fitting range of 95 dB and can only overcome moderate-heavy hearing loss.

CONCLUSIONS

The prevalence of presbycusis in Tangerang City Hospital from 2014 to October 2023 was 0.1% (48 cases) out of 48 presbycusis cases, there were 35 male patients (72.92%) and 13 female patients (27.08%). Based on financing guarantees, there were 43 patients (89.58%) using BPJS and 5 (10.42%) patients using public financing. Of the total 48 presbycusis cases, 10 (20.83%) patients received hearing aid therapy and 38 (79.17%) other patients did not receive hearing aids.

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