

Tinnitus in the elderly - Comorbidities, impact on life quality and enhanced treatment strategies

Dr. Eugenia Maria Domuța, Assistant Professor, Dr. Emil Mărginean, Professor, Surgery Department, Faculty of Medicine and Pharmacy, University of Oradea, Romania

INTRODUCTION

Tinnitus is a perception of sound with no outside source, a common sensation that affects between 7-32% of the population. Almost everyone notices a form of tinnitus once, but when is constant and bothersome can negatively affects the patient's quality of life.

Tinnitus is classified primary (idiopathic or associated with sensorineural hearing loss) and secondary (associated with a specific underlying cause or an identifiable organic condition).

The purpose of this study was to determine the possible causes of tinnitus in elderly population and to determine the most appropriate approach to help the patient, taking into account the fact that medical therapy may reduce the severity of symptoms and complications, but doesn't cure the tinnitus.

MATERIAL AND METHODS

590 patients hospitalized in ENT Department up to 60 years old during 1 year were included in this retrospective study.

All subjects were assessed only for subjective nonpulsatile and constant tinnitus and for different comorbidities: neurological, metabolic, cardiovascular, rheumatologic and psychiatric diseases.

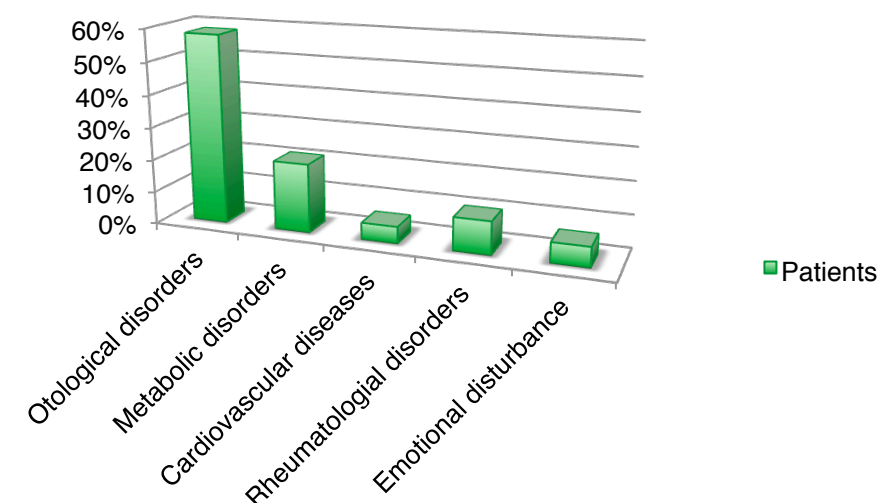
After history and self-reported questionnaire (Tinnitus Handicap Inventory-screening version) we performed clinical examination and audiological measurements (pure tone audiometry and suprathreshold audiometry).

For the patients diagnosed with bilateral subjective nonpulsatile tinnitus lasting 6 months or longer which affects negatively quality of life were applied medical treatment (1st group) and alternative therapy plus electronic devices (2nd group).

RESULTS

Tinnitus was reported at 165 patients ≥ 60 years old (28%) without significant difference related to sex, origin, excessive alcohol, caffeine and tobacco use.

Tinnitus frequently coexist with bilateral sensorineural hearing loss (presbiacusis) and other risk factors (noise exposure, medications and potential ototoxic exposures, treatable otologic conditions).

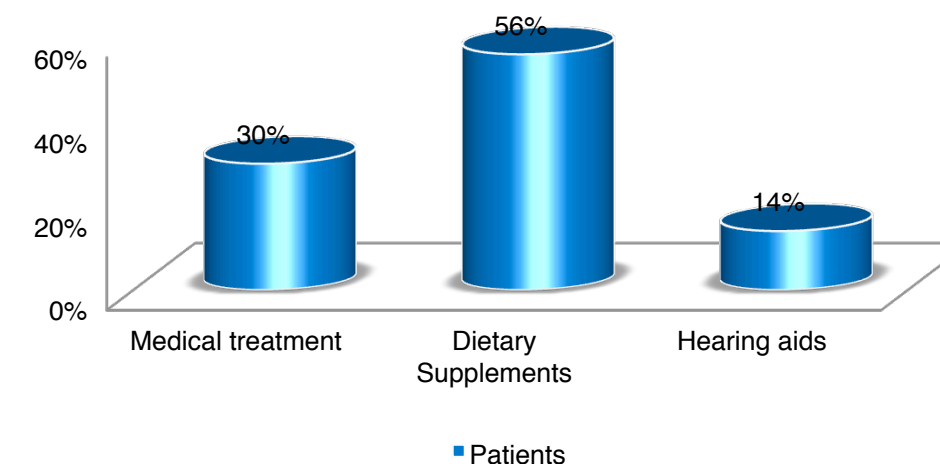


Tinnitus can occur with medical conditions not directly associated with the ear:

- metabolic disorders: diabetes, hypothyroidism, dyslipidemia

- cardiovascular diseases: hypertension
- rheumatological disorders: cervical spondylosis or temporo-mandibular joint disfunction
- emotional disturbances (poor attention and concentration) and psychiatric illness (disturbance of sleep -45%-, anxiety and depressive symptoms).

Many treatments for chronic tinnitus have been attempted but the condition remains difficult to cure.



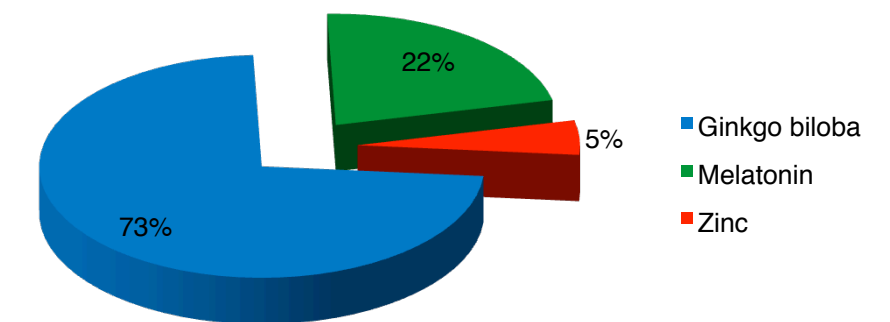
For the situations without medical treatable conditions were applied:

1st group: medical treatment-alprazolam, 0,25 mg x 2/day

2nd group: electronic devices (hearing aids for patients with hearing impairments) and dietary supplements:

- ginkgo biloba extract 120 mg/day in the morning
- melatonin 3 mg/day in the evening
- zinc 16 mg/day.

The association between dietary supplements and hearing aids showed an improvement in life quality and sleep compared with medical treatment in 2/3 of cases, using THI-S.



CONCLUSION

Tinnitus is a symptom recognized for thousands of years and represents a common problem of the elderly population.

It can significantly affect quality of life (fatigue, stress, sleep problems, cognitive problems), anxiety and irritability.

Its association with treatable conditions reduces the quality of life but, despite of lack of cure for tinnitus, there are many approaches to treatment that can improve symptoms.

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