

# COMPARATIVE STUDY OF TREATMENTS FOR *TINNITUS*: ALLOPATHY OR HOMEOPATHY?

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**Abstract:** *The study described in this paper aims to compare the efficacies of homeopathy and allopathic therapy for tinnitus of different etiologies and periods of time since onset. It is a retrospective study with a lower reliability than prospective ones, but reaching the same results regarding the Gingko Biloba therapy as the most prospective studies published, respectively its efficacy only in vascular conditions determined tinnitus. While homeopathy showed less efficacy than Gingko Biloba in vascular tinnitus (with the highest incidence o all tinnitus causes), this complementary therapy proved to be more efficient in posttraumatic and idiopathic ear noises, while in tinnitus due to professional noise exposure none of these treatments showed significant efficacy.*

**Key words:** *tinnitus, homeopathy, Gingko biloba.*

## 1. Introduction

Tinnitus is the perception of a sound without any external source.

The high frequency of this condition led to numerous studies researching the causes and therapeutic options for these patients.

The incidence of tinnitus found in these studies was around 10%, while the incidence of severe, very disturbing tinnitus, around 1% of the population [5].

Consequently, a high variety of therapeutic methods were used trying to alleviate this symptom: medical drugs, natural remedies, homeopathy, acupuncture, counseling and medical devices, with different efficacy depending on authors.

Pharmaceuticals used against tinnitus are neurotrophic and vasoactive drugs, as well as anti-depressants, anti-convulsivants,

muscle relaxants and anxiolytics, most with serious side-effects (dryness of the oral mucosa, constipation, heart conditions, vision troubles addiction problems). No drug is admitted by the Food and Drug Administration (FDA) for the treatment of tinnitus.

Preventive recommendations to reduce the intensity and frequency of inconstant tinnitus include the reducing of exposure to noise, avoiding long, total silence, avoiding stressful situations, exhaustion, normalizing salt intake, avoiding caffeine and smoking and exercising regularly.

Electronic devices were also developed, aiming to suppress the subjective noise, in order to make it less bothering. These devices include white noise devices which simulate environmental sounds, hearing aids (useful especially if there is an

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associated hearing loss) and masking devices (look very much like hearing aids and emit a continuous, low-level white noise) [2].

**Auditory Habituation or Tinnitus Retraining Therapy:** low-level sound generators adjusted to a level that the patient hears both that sound and the tinnitus; in time, with help with associated targeted psychological counseling, most patients learn to cope with the noises in the ears. This combined approach is proved by the most recent studies to be the most efficient but it is not used enough yet in our region to be included in this study [1].

## 2. Objectives

The study aims to establish the best therapy choice in patients with tinnitus, according to age of the patients and of the symptom, to the cause of tinnitus (when detectable) and to its severity (impairing or not daily activities).

Homeopathy, natural medicine (Gingko Biloba) and medical devices were comparatively analyzed as efficacy and safety in tinnitus patients.

## 3. Material and Methods

Patients examined in the ENT outclinic of the County Hospital Braşov as well as patients visited in the private ENT and homeopathy office were analyzed in this retrospective study.

A number of 82 patients (from the 747 presented in both offices during the last twelve months - 1. July 2012 to 30. June 2013, beginning of therapy) complained about tinnitus, although only for 62 of them it was the main complaint and just 9 considered that tinnitus is definitely impairing their daily activities.

The age of these tinnitus patients ranged between 34 and 93 years, 51 male and 31 female patients.

As patients requiring homeopathic therapy are less frequent as classical therapy seekers, the homeopathy group was significantly smaller (32 versus 50 patients). The average age in both groups was close to 62 (60.9 versus 62.8 years).

An issue to be underlined here is that the most used medication, by naturopaths as well as by allopathic physicians, for tinnitus, is actually a natural remedy, a certain fraction of Gingko Biloba Extract (EGb761). This study compares the efficacy of this medication compared to homeopathic therapy adapted to each patient in the respective group.

An important issue in this pathology is the period of time passed since the onset of the symptom, hence it is classically known that therapeutic resources diminish in chronic cases.

Patients were classified in three groups according to this criterion: less than a month, one to three months and more than three months.

The cause of tinnitus was also taken into account: noise exposure (13 patients), vascular conditions (54 patients), trauma (4 patients) and idiopathic (10 patients).

All tinnitus patients were reevaluated after three months of therapy, the homeopathy patients (named H), receiving their constitutional remedy in a 30 centesimal dilution three days daily and then weekly, while the Gingko Biloba group (G) received 80 mg two times daily for the same three months period.

No control group was taken into account since the study is retrospective.

Statistic analysis of the results was applied in order to appreciate the reliability of these two therapies in tinnitus cure.

## 4. Results and discussions

There were 77 of the initial 82 patients (94%) reevaluated after three months of therapy, 31 patients in the homeopathy group and 46 in the Gingko Biloba group could be taken in study.

Table 1  
*Severity of tinnitus*

Severity	patients	%
secondary complaint	11	13,4
main complaint	62	75,6
impairing daily activities	9	10,9

Table 2  
*Causes of tinnitus in both therapy groups*

	H	G	Total
Vascular	18	32	50
Noise exposure	7	6	13
Trauma	2	2	4
Idiopathic	4	6	10

The most frequent cause of tinnitus was the vascular condition (60%, Table 1, Figure 1), revealed by the association of tinnitus with coronary insufficiency, altered lipid profiles and cerebral vascular diseases.

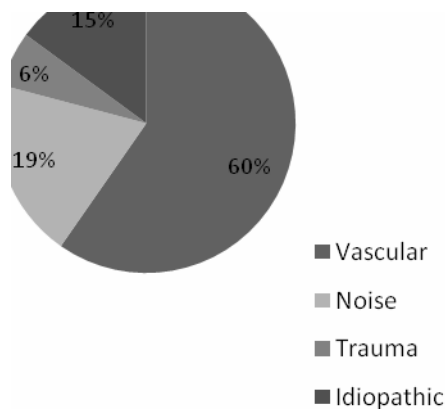


Fig. 1. *The most frequent causes of tinnitus*

Another important issue to be considered in the evaluation of tinnitus is the time passed since onset of the complaint. Most patients seek or receive

very late medical help, more than three months after tinnitus onset, (34 patients, 39%, Table 3, Fig. 2), reducing significantly the chances for an efficient oral therapy.

Table 3  
*Time since onset of tinnitus*

	H	G	Total
0-1 month	4	8	12
1-3 months	13	17	30
more than 3 months	14	21	35

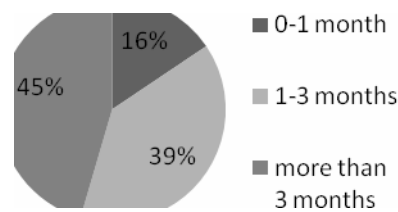


Fig. 2. *Time since onset of tinnitus*

As homeopathic therapy is not adapted to the disease but to the patient, there were different homeopathic drugs handed out to various patients.

Table 4  
*Homeopathic remedies administered in the H group*

Remedy	Patients	%
Arnica montana	1	3
Chininum sulphuricum	5	16
Kalium phosphoricum	6	19
Natrium sulphuricum	5	16
Pulsatilla	7	23
Sulphur	4	13
Silicea	3	10

The common feature of these substances is tinnitus in their materia medica, but other symptoms and features of the patients led to the indication of the following remedies: Arnica (1 patient), Chininum Sulphuricum (5 patients), Kali Phosphoricum (6 patients), Natrum Sulphuricum (5 patients), Pulsatilla (7 patients), Sulphur (4 patients) and Silicea (3 patients) (Table 4).

Tinnitus amelioration results in the H group is presented in table 5:

Table 5  
*Tinnitus amelioration in the H group*

Time since onset	no amelioration	some amelioration	remission
0-1 month	0	1	3
1-3 months	4	5	4
more than 3 months	8	5	1

We can notice there was none of the patients with recent onset of tinnitus without any response to homeopathic therapy but, also, that only one of the patients with chronic tinnitus benefited completely from this therapy (Fig. 3).

Statistical normality evaluation of this group showed a normal distribution of the data, so a t-test was applied (with help of Assisat computer software), leading to a statistically significant efficacy of homeopathy in less than three months old tinnitus, while in chronic tinnitus its efficacy proved not to be statistically significant.

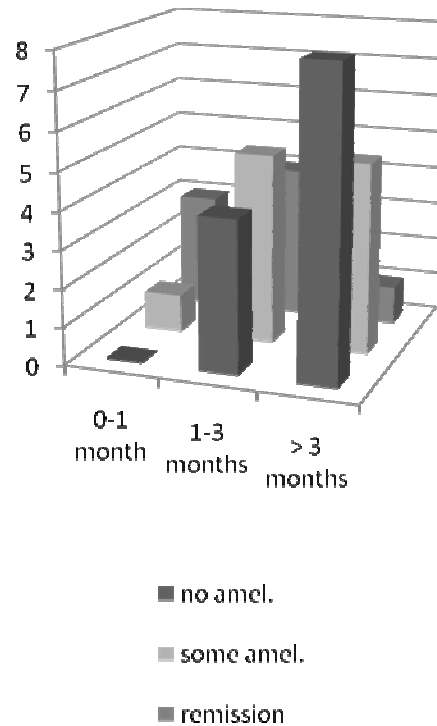


Fig. 3. *Tinnitus amelioration in the H group, correlated with the time passed since onset of tinnitus*

Tinnitus amelioration results in the G group is presented in table 6, where we can notice a similar situation as in the previous group, with almost no persistence of constant ear noises in the recent onset category and almost no benefit of therapy in more than three months old tinnitus.

Table 6

Time since onset	no amelioration	some amelioration	remission
0-1 month	0	4	4
1-3 months	5	7	5
more than 3 months	15	4	2

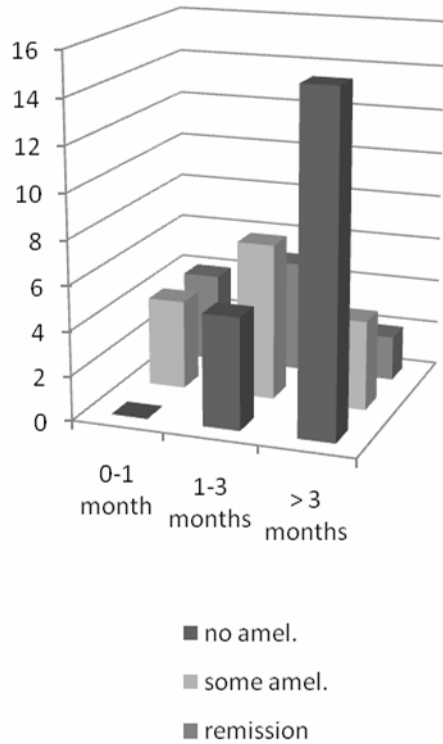


Fig. 4. Tinnitus amelioration in the G group, correlated with the time passed since onset of tinnitus

Correlating the efficacy of oral medical therapy with the causes of tinnitus, the results in the H group are presented in table 7.

Table 7

Cause	no amel.	some amel.	remission
Vascular	6	8	4
Noise exposure	4	3	0
Trauma	0	1	1
Idiopathic	0	2	2

This data reflect some efficacy of homeopathic therapy in vascular tinnitus (22% remission, 44% amelioration), less in professional or recreational hearing loss

(0% remission), but statistically significant results in posttraumatic and idiopathic tinnitus (50% remission and 50% amelioration) in both groups.

Table 8 presents the response of the patients of different etiology groups to Gingko-biloba therapy.

Table 8

Cause	No amel	Some amel	remission
Vascular	10	11	11
Noise exposure	4	2	0
Trauma	1	1	0
Idiopathic	3	2	0

While gingko biloba proved to be more efficient than homeopathy in the vascular etiology group (34% remission and 34% amelioration), it shows to be less efficient than homeopathy in the other three groups.

The results reached in this paper are similar to other studies regarding gingko biloba efficiency in the treatment of tinnitus, several showing its usefulness only in vascular tinnitus [3,4]. There are far less studies of homeopathic treatments of tinnitus, especially because this therapy is very hard to standardize. The first question that arises every time a homeopathic remedy is used to cure a patient is if the remedy is the correct one for that patient and just secondary if a certain symptom or condition can be cured with homeopathy.

### 5. Conclusions

There is no pharmaceutical agent proved yet to be efficient in all etiological types of tinnitus.

Gingko Biloba is useful in recent, vascular conditions caused tinnitus, and without significant action tinnitus from

exposure to noise, trauma or idiopathic tinnitus.

Homeopathy is less effective in vascular tinnitus but can cure some cases of traumatic and idiopathic ear noises.

Studies regarding the efficacy of electronic devices in the management of tinnitus should also be conducted, given the poor response to all pharmaceuticals of chronic ear noises.

Tinnitus preventive methods and programs should be applied on a larger scale: effective noise protection devices in loud industrial environments, education programs against recreational noise abuse, stress management programs, education against stimulants abuse and a better dietary education to avoid metabolic and vascular pathology.

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