Focus on tinnitus – a real torment

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Introduction
Dear colleagues,

The theme of my short talk today is new approaches in the treatment of patients with chronic tinnitus. I should like to present my initial observations, as an enthusiastic practitioner of conventional medicine and an open-minded user of progressive therapy methods, which will focus on TINNITUS, a really annoying hearing problem.

First, however, allow me to quote Arthur Schopenhauer who, as a “universal protagonist”, puts into words just what “new age doctors” are thinking.

Quote: “All truth passes through three stages: First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident.”

We are currently at the second stage from the viewpoint of the “opposing camp”. Yet there are a large number of therapists here today and those with successfully treated patients at the back of their minds who have already reached the third stage.

This fact is in tune with the current climate in much the same way as certain diseases can also be ascribed to current social failings. Whether it is the increase in allergies, environmentally or psychosocially induced disorders, the biological marvel that is man with all his regulatory mechanisms is beginning to falter and we therapists are in ever greater demand.

Just such a phenomenon is the unusually sharp rise in the number of cases of tinnitus, whose precise pathogenetic mechanism has hitherto not been satisfactorily explained.

The growing occurrence of these symptoms and their increasing relevance to ENT practice may well be connected with the dramatic industrial and technical development of the last 50 years, amongst other things.

Some 15% of patients in German GP practices complain of a terrible noise in their ears (and, in ENT practices, the figure is even as high as 25%). Tinnitus is a complex symptom affecting human hearing which is caused by many factors and which manifests itself in various ways.

Both affected patients and also therapists are, for the most part, dissatisfied with the measures currently available, with prognostic assertions and the level of successful outcomes, to the extent of feeling powerless and helpless. What is needed here is synergy between western scientific considerations and the essential analysis of biophysical energetics in order to diagnose the factors at the root of the problem and focus therapy in a precise manner.

Definition and epidemiology
Tinnitus is a ubiquitous and common symptom. When it occurs temporarily without any morphological changes resulting in impaired hearing it is harmless. At the time of the 1998 survey (representative survey by the German Tinnitus League), approximately 2.9 million people in Germany complained of ringing in the ears (from the Latin “tinnire” ringing).

Further retrospective research results revealed, amongst other things, that over 10 million people each year experience tinnitus lasting more than five minutes. Tinnitus becomes chronic in around
250,000 people each year, around 28,000 of whom recover in the first year.

Three million adults present with chronic tinnitus with 37% of these only being aware of the condition in silence (grade 1 severity). In 44% of those affected, tinnitus is largely concealed by background noise while 17% are aware of it even in the presence of extremely loud noise.

Considered in more detail, the quality of life of 1.5 million people is moderately to seriously affected, while that of around 300,000 patients is severely affected.

**Explanatory pathogenetic model for tinnitus**

Until now there has been no comprehensible explanation for the pathophysiology of tinnitus. Not only cochlear but also central auditory processes may certainly be responsible as triggering factors. Even after taking detailed patient histories and evidence, it is only possible to make hypothetical assumptions without being able to produce reliable proof.

The sensory organ, the ear, is possibly the definitive point of origin of acute tinnitus through external and internal hair cells in the cochlea with their nerve feedback mechanisms to the hearing system. The ear is subject to various influences which cannot be explained solely by ischaemic processes.

In addition pathological processes in the area of the synapses of the 8th cranial nerve, triggered by spontaneous discharge or inhibitory dysfunction, play a significant part.

Recent studies show that tinnitus can be interpreted as a consequence of reorganisation processes in the central auditory system. A relevant claim regarding the problem of tinnitus related to the distortion of the tonotopic map and a change in the affected person’s discrimination thresholds. The more distorted the cortical representation of tinnitus, the more the patient suffered from ringing in the ears.

Menière’s disease with its endolymphatic hydrops (responsible for 10% of tinnitus cases), other types of dysfunction of the inner ear, imbalanced activity in the retrocochlear or central nerve fibres as well as compressive/degenerative processes should all be mentioned here simply as additional causal factors.

Tinnitus induced purely as a result of stress is certainly a popular theory yet this has not been subject to sound scientific investigation. Yet the unusual psychosocial disorder is attributed prognostic significance as regards chronicity and decompensation.

The following pathophysiological processes therefore make an impression:

I. Multifactorial damage to hair cells and auditory nerve
II. Regular pattern of modification of spontaneous activity in the cochlear nerve and the superordinate auditory systems
III. Nerve impulses in the cortex lead to the perception of tinnitus

**Classification by degree of severity**

Patients present to ENT practices with discrepant clinical pictures. On the one hand there are patients who compensate well. Then there are those whose chronic symptoms place them under considerable psychological strain.

In around 90% of cases, tinnitus patients have hearing loss in the inner ear where the tinnitus frequency which is perceived subjectively and can be measured audiometrically frequently accords with the frequency of maximum hearing loss.

On closer examination a distinction can be made between *acute tinnitus* between four weeks and three months and subacute
tinnitus between three and twelve months after the first manifestation. If ringing in the ears has been present for a year or more, this is referred to as chronic tinnitus.

Based on the previous guideline which has been awaiting amendment since 2009 (due to controversial discussions regarding uniform treatment strategies), the expert committee distinguished four categories of tinnitus:

**Compensated** – The patient registers ringing in the ears yet is able to cope with it in such a way that no secondary symptoms occur.

- **Grade I:** No psychological strain
- **Grade II:** Mainly perceptible in silence, affects person adversely when under stress or mental strain.

**Decompensated** – Tinnitus has huge impact on all aspects of life and leads to development of secondary symptoms with considerable psychological strain.

- **Grade III:** Tinnitus leads to on-going impairment of private and working life affecting the person emotionally, cognitively and physically
- **Grade IV:** Tinnitus results in total decompensation in the person’s private life and to their inability to work.

**Conventional tinnitus therapy**

In the acute stage, ringing in the ears is treated where possible by addressing the particular problem. If the cause cannot be found, there is no recognised medication as such.

Patients in German-speaking countries initially receive drug treatment with various preparations such as magnesium, vitamin E, glucocorticoids (e.g. cortisone). In addition, local anaesthetics (e.g. procaine) are administered intravenously and haemodiluting agents, especially pentoxifylline, HAES or a Ginkgo plant preparation are used. These medicines are prescribed either as tablets or infusions according to the degree of severity and causal considerations. However no treatment has so far been scientifically proven to be effective.

The large number of different therapies suggested leads to the assumption that no treatment has so far been definitely proven to be effective. Essentially no therapy can in theory be definitely supported or contradicted either as we do not yet know enough about the processing of auditory input.

However it is assumed that acute tinnitus results, in all probability, from cochlear cell damage, generated by hypoxic/ischaemic processes. Consequently each case of acute idiopathic tinnitus, with or without accompanying hearing defect, is regarded as equivalent to sudden loss of hearing.

There is no room for therapeutic scepticism, on the one hand, due to the patient’s expectations and, on the other, for legal reasons. Although the current drug guidelines are not clearly defined as regards inner ear disorders, committees of experts are looking for evidence-based treatment options.

Until the problem is solved definitively, drug treatment should be introduced as soon as possible however. This procedure will, in all probability, prevent early centralisation.

As for the treatment of chronic tinnitus, the new guidelines explicitly mention the lack of evidence from any medication.

Treatment with acoustic apparatus is assigned considerable importance as a form of auditory medical treatment of ringing in the ears. However, treatment strategies are also followed here directed at the auditory cortex through non-invasive transcranial magnetic stimulation and invasive supradural stimulation.

Moreover, drugs such as neramexane (NMDA receptor antagonist) and
antidepressants are currently subject to clinical trials. Therapies based on the habituation model, are increasingly being employed to treat tinnitus in contrast to drug treatment which has so far shown so little promise. These use eduction and cognitive behavioural therapy.

I shall now describe an interesting study recently analysed in the University Hospital at Cologne (see table below). 107 patients with different tinnitus characteristics were treated over a 4-year period. Particular attention was paid to the patient group whose tinnitus had persisted for a long time (15%).

### Recovery from tinnitus through antiphlogistic rheological therapy

(ENT clinic and outpatients’ department of Cologne University Hospital, observation period: 4 years, n = 107 patients)

<table>
<thead>
<tr>
<th></th>
<th>recovery</th>
<th>better</th>
<th>Same</th>
<th>worse</th>
<th>total</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute tinnitus</strong></td>
<td>12</td>
<td>22</td>
<td>14</td>
<td>1</td>
<td>49</td>
<td>45.8 %</td>
</tr>
<tr>
<td><strong>Recurrent acute tinnitus</strong></td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>13</td>
<td>12.1 %</td>
</tr>
<tr>
<td><strong>Persistent tinnitus</strong></td>
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<td>3</td>
<td>9</td>
<td>2</td>
<td>16</td>
<td>15.0 %</td>
</tr>
<tr>
<td><strong>Acutely exacerbated chronic tinnitus</strong></td>
<td>3</td>
<td>14</td>
<td>12</td>
<td>0</td>
<td>29</td>
<td>27.7 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19</td>
<td>47</td>
<td>38</td>
<td>3</td>
<td>107</td>
<td>100 %</td>
</tr>
<tr>
<td><strong>Percent</strong></td>
<td>17.8 %</td>
<td>43.9 %</td>
<td>35.5 %</td>
<td>2.8 %</td>
<td>100 %</td>
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</table>
Problem and method

Our patient group numbered 50 participants in total. 11 patients received the combined complimentary medicine treatment customarily offered in our practice (Bicom bioresonance therapy plus one or two optional therapy modules: infusion treatment with homeopathic complex drugs, acupuncture (mostly Sujok), SCENAR therapy and if necessary oxygen multistage therapy), which were not included in the analysis. Only 39 patients were treated solely with Bicom therapy. An audiogram was first created to show the patient’s auditory threshold and determine the type of impaired hearing. In addition, actual tinnitus determination (tinnitus matching) was performed prior and four weeks after treatment: determining tinnitus loudness and frequency characteristics with narrow band noise and pure tones. Psychoacoustic determination of tinnitus volume by means of an audiometer plays a major part in this. This enables the relation between the sound pressure level above the auditory threshold and subjective perception of tinnitus loudness and nuisance level to be determined by means of scales. (If these latter criteria yield disproportionately high pathological results, it can be assumed that ringing in the ears is centralised [LLD = volume-loudness discrepancy].)

An effort was made to find out the disruptive influences which were already known and confirmed by using bioresonance. With the help of a tinnitus assessment sheet which recorded both the patient’s specific details and their bioenergetic status (see page 14 and 15 above), we initially treated the basic stresses listed. In addition, the therapy programmes initially determined were conducted (see page 15 below).

Practical observation was limited to just five bioresonance sessions (with minimal treatment cost on the part of the patient) to enable an assessment of whether treatment was likely to be successful or fail.

The only specific detail to be mentioned at this point is that all the patients had a relevant problem in the craniomandibular and cervicocranial area.

“Neuromuscular release” from chronic dysregulation through bioresonance treatment resulted in a significant improvement in local findings for these mainly functional deficiencies e.g. in the area of the temporomandibular joint and hyoid bone.

Due to the specific nature of the patients’ problems in many cases, it was not possible to conduct an exhaustive analysis of the differentiated data in our study. Our observations allowed us essentially to search for and diagnose focal toxicoses in the head and neck area. Programs 923, 839 and 527 were applied directly to the affected ear via a stirrup electrode (flexible electrode also possible).
Tinnitus assessment sheet
[internal observation within the practice using BICOM resonance therapy]

Patient's ENT history:
__________________________________________________________________________________________
__________________________________________________________________________________________________________________________ ...
__________________________________________________________________________________________________________________________

Patient's ENT findings:
__________________________________________________________________________________________
__________________________________________________________________________________________________________________________ ...
__________________________________________________________________________________________________________________________

Tinnitus criteria:

Laterality:  o right o left  [if both ears affected, assess most seriously affected ear]

Frequency:  o rare o occasional o frequent [intermittent] o permanent

Volume:  o minimal o moderate o severe

Quality:  o low frequency o medium frequency o high frequency

Use the numbers 1 to 10 to indicate the extent to which tinnitus affects you with 0 = not at all and 10 = very badly.

How badly do you feel your tinnitus affects you?

Before starting therapy
1  2  3  4  5  6  7  8  9  10

........................................................................................................................................

After 1st treatment session

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After 2nd treatment session

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After 3rd treatment session

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After 4th treatment session

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After 5th treatment session

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4 weeks after last treatment session

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### Bioenergetic diagnosis

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of birth</th>
<th>Date</th>
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Main diagnosis / treatment goal

- Electromagnetic stress
  - Geopathy
  - Electronic smog
  - Other:
- Hormonal imbalance
- Metabolic disorder (RNA/Pb)

Elimination organs
- Liver
- Gall bladder
- Kidney right/left
- Intestines
- Lungs
- Pancreas
- Lymph
- Lower abdomen
- Cervical spine
- Thoracic spine
- Lumbar spine
- Sacrum
- Joints

Interference fields
- Frontal sinus
- Maxillary sinus
- Tonsils
- Eyes
- Ears
- Stomach
- Appendix
- Temporomandib. joint right/left
- Hyoid bone

Scar interference field
- Navel
- Other:

Elimination organs
- Intestines
- Paranasal sinuses
- Mould
- Bronchi
- Other:

Mycoses
- Candida

Teeth
- Amalgam
- Present
- Removed
- Stress
- Allergy

Material not tolerated:

<table>
<thead>
<tr>
<th>8 7 6 5 4 3 2 1</th>
<th>1 2 3 4 5 6 7 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 7 6 5 4 3 2 1</td>
<td>1 2 3 4 5 6 7 8</td>
</tr>
</tbody>
</table>

### Testing/applying therapy programs

- Temporomandibular joint / hyoid bone blockage (530, 570)
- Block in cervical spine (533)
- Scars (900, 910)
- Toxin elimination (970, 290, 331)
- Chronic degenerative tissue process (923)
- Nerve regeneration (839)
- Tinnitus (527)
Results

Figure 1 represents the percentage distribution of patients in terms of the length of time that they experience ringing in their ears.

**Fig. 1: Period with tinnitus [years]**

Figure 2 shows the improvement in tinnitus as a result of treatment (score >0).

**Fig. 2: Improvement through treatment [%]**
Figure 3 shows the level of satisfaction with therapy in percentage terms. A precise distinction must be made here with regard to the patient’s own evaluation, as he experiences a subjective improvement in the ringing sound on the one hand and satisfaction with any positive tinnitus development following therapy on the other. This is linked to the psychological strain experienced by the patient as a result of a generally impaired quality of life associated with tinnitus and also influenced by their expectations of the Bicom therapy.

**Fig. 3:** Satisfaction with tinnitus therapy

Figure 4 represents the correlation between the specified criteria of improvement and satisfaction following therapy in the individual groups of patients.

**Fig. 4:** Satisfaction with tinnitus therapy depending on duration of the tinnitus [Y]
Evaluation and summary

In summary it can be seen that treating patients with persistent ringing in the ears initially holistically and then focusing on their tinnitus yielded positive results. Checking the measurements for tinnitus parameters produced varying findings. The aforementioned study in Cologne (improvement 18.75%) reveals that when treating patients with persistent tinnitus the problem of ringing ears had a positive outcome, with 56% giving a score >0 and 13% giving a score >3 points.

On the one hand there was objective evidence that volume had decreased and/or the frequency had modified (“in some cases perceived subjectively as more pleasant”) yet, on the other hand, there was no change in the tinnitus. These latter patients were better able to cope with the ringing in their ears probably because of the more pleasant overall feeling.

The only specific detail to be mentioned at this point is that all the patients had a relevant problem in the craniomandibular and cervicocranial area. “Neuromuscular release” from chronic dysregulation through bioresonance treatment also resulted in a significant improvement in local findings for these mainly functional deficiencies e.g. in the area of the temporomandibular joint and hyoid bone.

Future recording of the cellular functional state in the cochlea through otoacoustic emissions would carry more weight under certain circumstances in order to assess any regeneration processes in the hair cells there.

We should also continue the collaboration between conventional and complementary medicine as far as acute tinnitus therapy, in particular, is concerned. On this point, results from early treatment where possible with allopathic medicine and combined with holistic Bicom bioresonance therapy are promising.

Apart from factors which are morphologically tangible, ringing in the ears represents a symptomatic “release valve” or the “symbolic vessel” which at some point will overflow. It is important in a similar manner to relieve and also positively influence this “Achilles heel” in the complex hearing system, which experiences a lesion through disruptive influences close to or far from the organ. This false acoustic perception can therefore be regarded as the result of pathogenesis from various individual factors relating to duration and intensity.

In the scientific literature no connection was found in hearing tests between the objectively measurable severity of the tinnitus and subjective perception of the complaint. So there are people who have very loud ringing in their ears yet who are evidently able to cope with it relatively well. We were also able to confirm this view through our observations.

To conclude I should like to add a minor artistic digression in the form of the following picture I painted. In 2003 I still had nothing in mind with bioenergetic holistic medicine. Yet the biophotons I now perceive (among the neurovascular energy bundles) revealed themselves then intuitively, beckoning me towards a different way of thinking and working. I am now grateful for this and look forward to further cases of synergy.
Healing is determined by oscillations and not by chemical matter. Our ability to resonate is a prerequisite for health and healing. Any medication which is used is ultimately merely a carrier for these oscillations (Paul Schmidt).